

ATLANTA XXV

19-21 APRIL 1999

DTIC QUALITY INSPECTED 4

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19991029 022

ATLANTA XXV

19-21 April 99

Table of Contents

Tuesday, April 20, 1999

"AMC Perspective," by General Johnnie E. Wilson, Commanding General (CG), AMC.	1
"Industry perspective," by Mr. William H. Swanson, Conference Co-Chair, Chairman & CEO, Raytheon Systems Company.	38

Panel 1 "History in the Making"

• General Louis Wagner, US Army (Ret.), Panel Chair	65
• Mr. George Kersals, AAI Corporation	70
"Information Security," by Mr. David Borland, Vice Director of Information Systems for Command, Control, Communications and Computers, Office of the Secretary of the Army.	76

"NDIA and AMC Acquisition Reform Implementation Survey,"
by MG Paul L. Greenberg, US Army (Ret.), Vice President,
Operations, NDIA and Mr. Gary A. Tull. 98

Panel 2 "Smaller Businesses in Competitive Environments"

- Mr. Donald M. Irvine, Chairman & CEO, VSE Corporation. 110
- RADM Pete DeMayo, US Navy (Ret.), Lockheed Martin Corporation. 120
- Mr. James M. Waller, Chairman and CEO, J. M. Waller Associates. 128

Wednesday, April 21, 1999

Panel 3 "Public / Private Enterprise"

- LTG Paul J. Kern, Director, Army Acquisition
Corps/Military Deputy, ASAALT, Panel Chair. 138
- BG George A. Landis, US Army (Ret.), Vice President and Deputy,
Product Support Division Raytheon Systems Company. 144
- Mr. Fred Strader, Vice President and General Manager,
United Defense Armament Systems Division. 150
- Mr. Jerry DeMuro, Vice President and General Manager,
Communication Systems Division, GTE Government Systems Corp. 157

"The Changing Army," by MG Joseph M. Cosumano, Jr., Assistant
Deputy Chief of Staff for Operations and Plans, U.S.Army.

NDIA

XXXV



INDUSTRIALISTS IN OLIVE DRAB

CONGRATULATIONS !!!

On your
SILVER
ANNIVERSARY

AMC Is Engaged In Worldwide Operations

Total (CIV / MIL / CONTR)
2,166 (687 / 422 / 1057)

Bosnia 125 (17/17/101)
Croatia 29 (0/0/29)

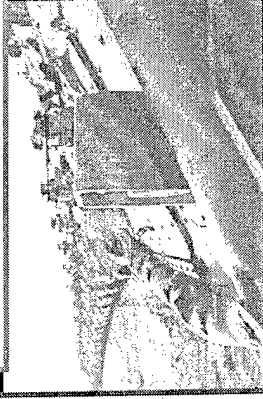
Hungary 144 (3/3/138)
Macedonia 1 (1/0/0)

Korea 173 (97/176)
Japan 1 (1/0/0)

Kuwait 70 (54/146)
Saudi Arabia 518 (40/162/316)

Australia 1 (0/1/1)

Domestic Terrorism
Rapid Response
Team - SBCCOM



France 3 (2/1/1)
Germany 798 (286/45/467)
Italy 40 (14/26/1)
Luxembourg 14 (5/9/1)
Netherlands 103 (45/48/6)
UK 12 (9/1/3)
Belgium 25 (10/15/1)

Canada 2 (0/2/1)
Alaska 66 (51/15/1)

Johnston Atoll 17 (17/0/0)

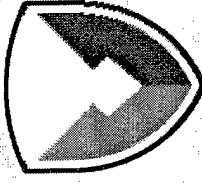
Honduras 3 (2/1/1)
Panama 3 (2/1/1)

Hawaii 41 (35/6/1)

Counter Drug
Operations



Don't Forget:



Operations:

Just Cause
Desert Storm
Provide Comfort
Southern Watch
Vigilant Warrior
Restore Hope
Support Hope
Uphold Democracy
Safe Haven
Vigilant Sentinel

Events:

Hurricanes:
- Hugo
- Andrew
- Iniki
- Mitch
LA Riots
Western Fires
Midwest Floods

Able Sentry
Joint Endeavor
Joint Forge

Allied Force

Business Practices

E-Commerce

**Total
Quality
Management**

Six Sigma

FORTUNE

companies
extreme
investing
pushing
tech
now.

SLOAN

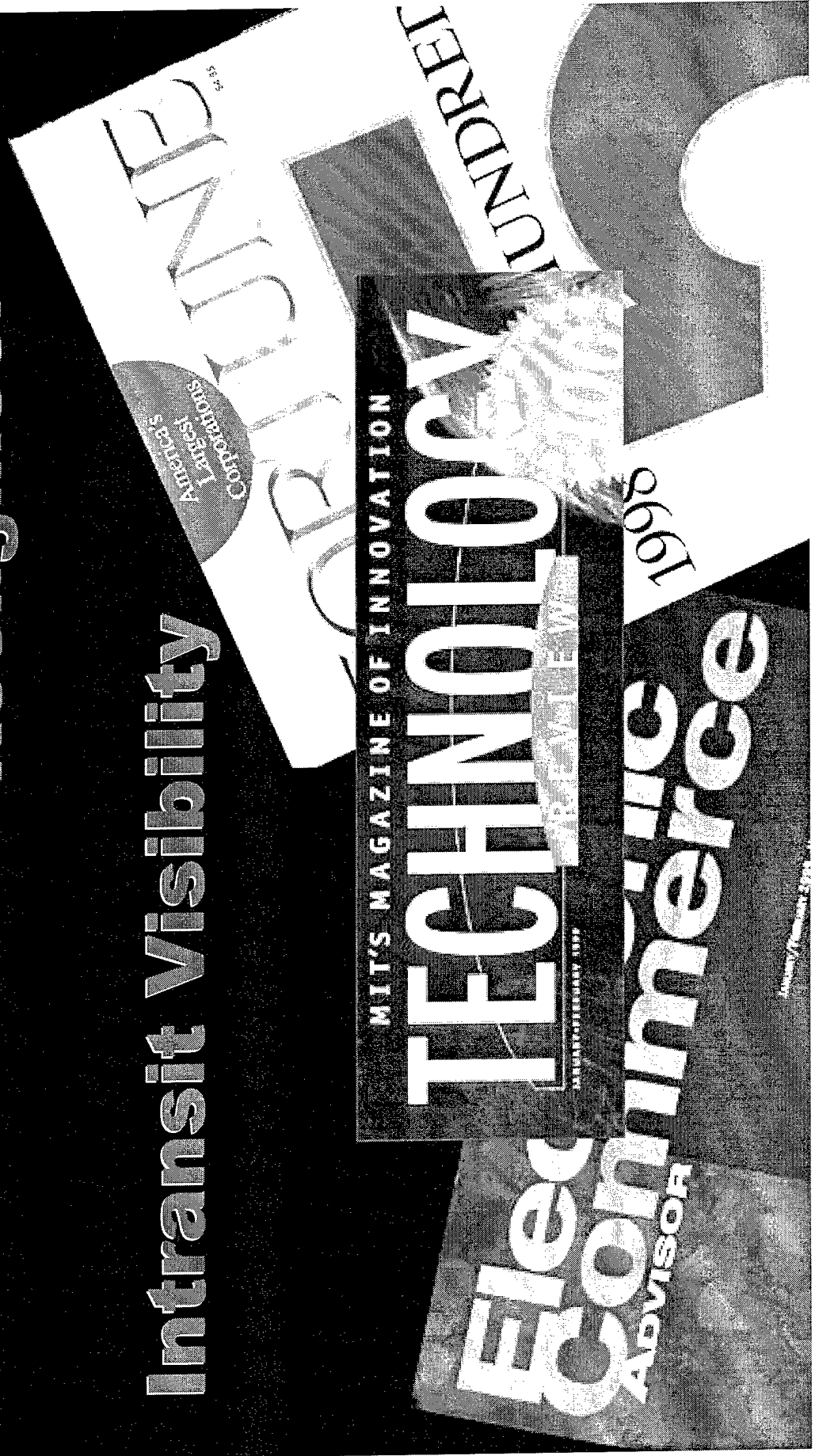
Management Review

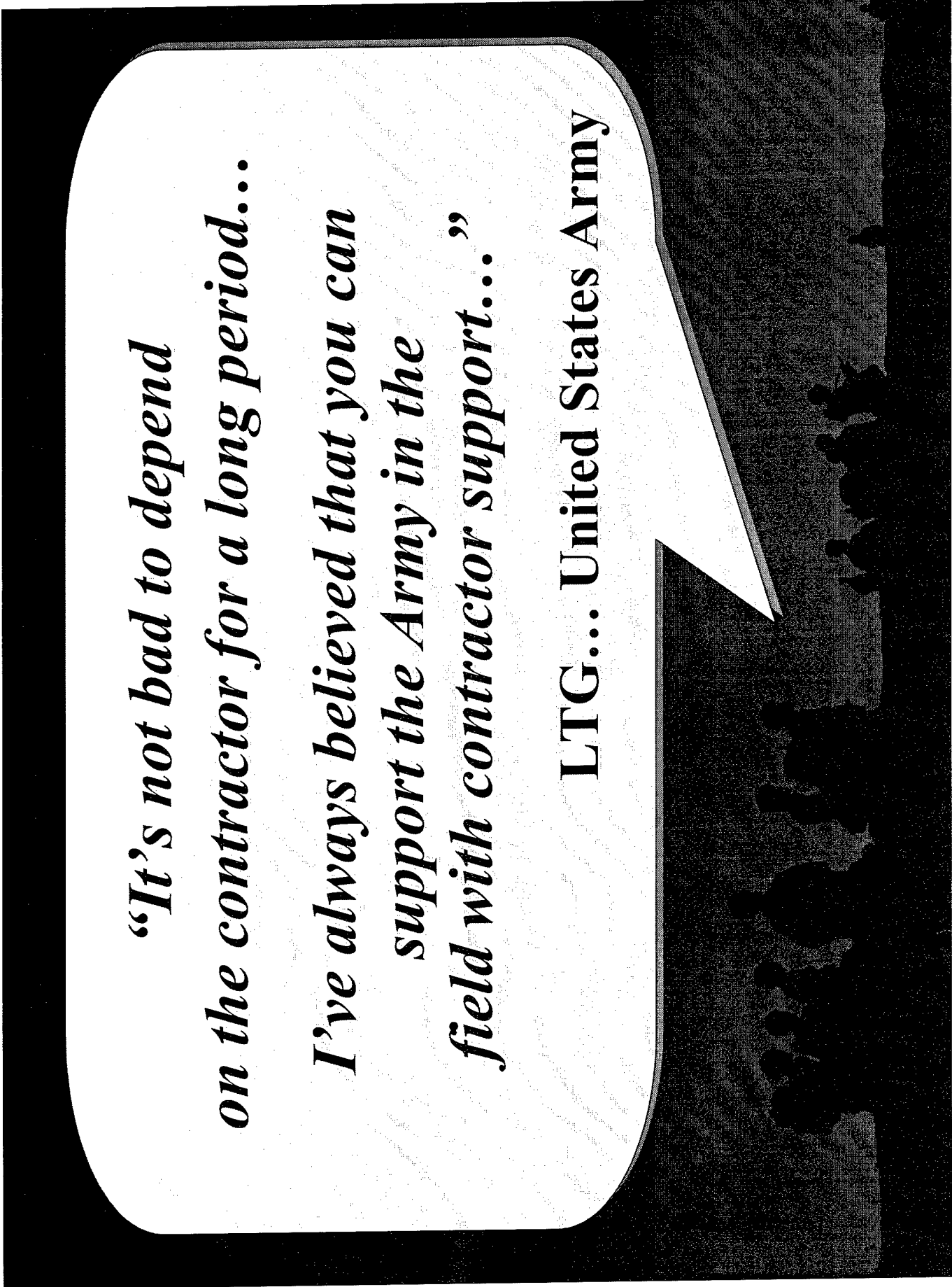


Just in Time

Reengineer

Intransit Visibility

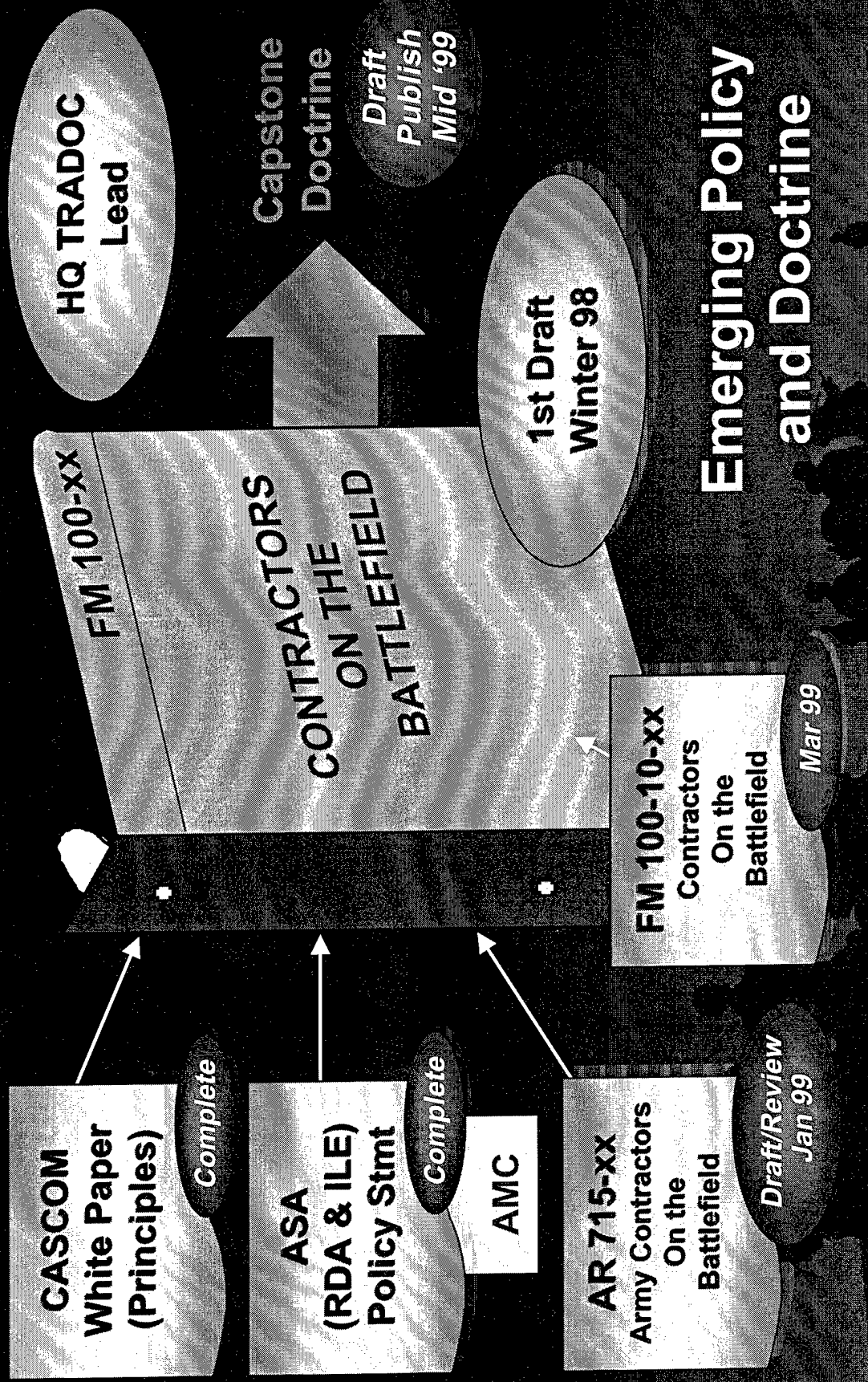




*“It’s not bad to depend
on the contractor for a long period...
I’ve always believed that you can
support the Army in the
field with contractor support...”*

LTG... United States Army

Civilian Contractors on the Battlefield

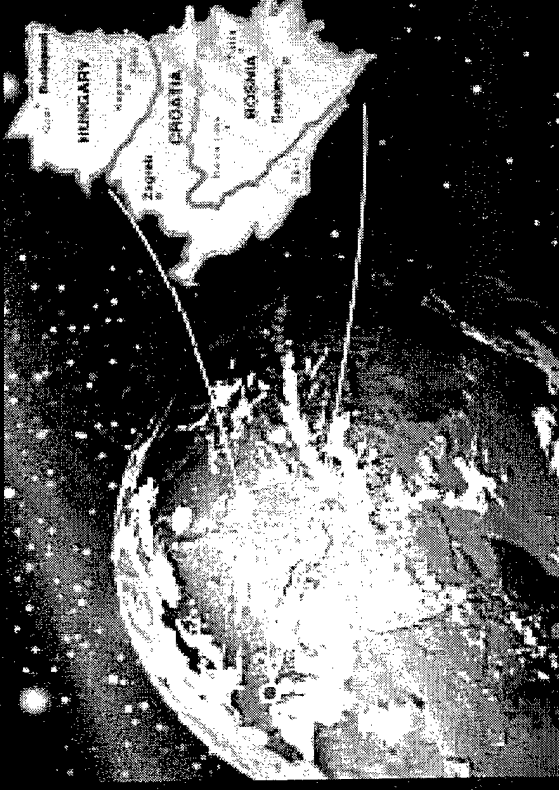


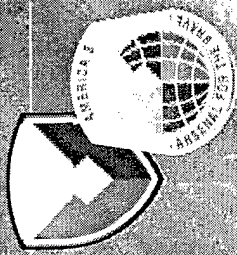
Operation Joint Endeavor/Guard

LOGCAP TASKS

- ★ Facility Setup & Maintenance
- ★ Upgrade Existing Facilities
- ★ Waste Management
- ★ BIOMED/HAZMAT
- ★ Power Generation
- ★ Showers and Latrines

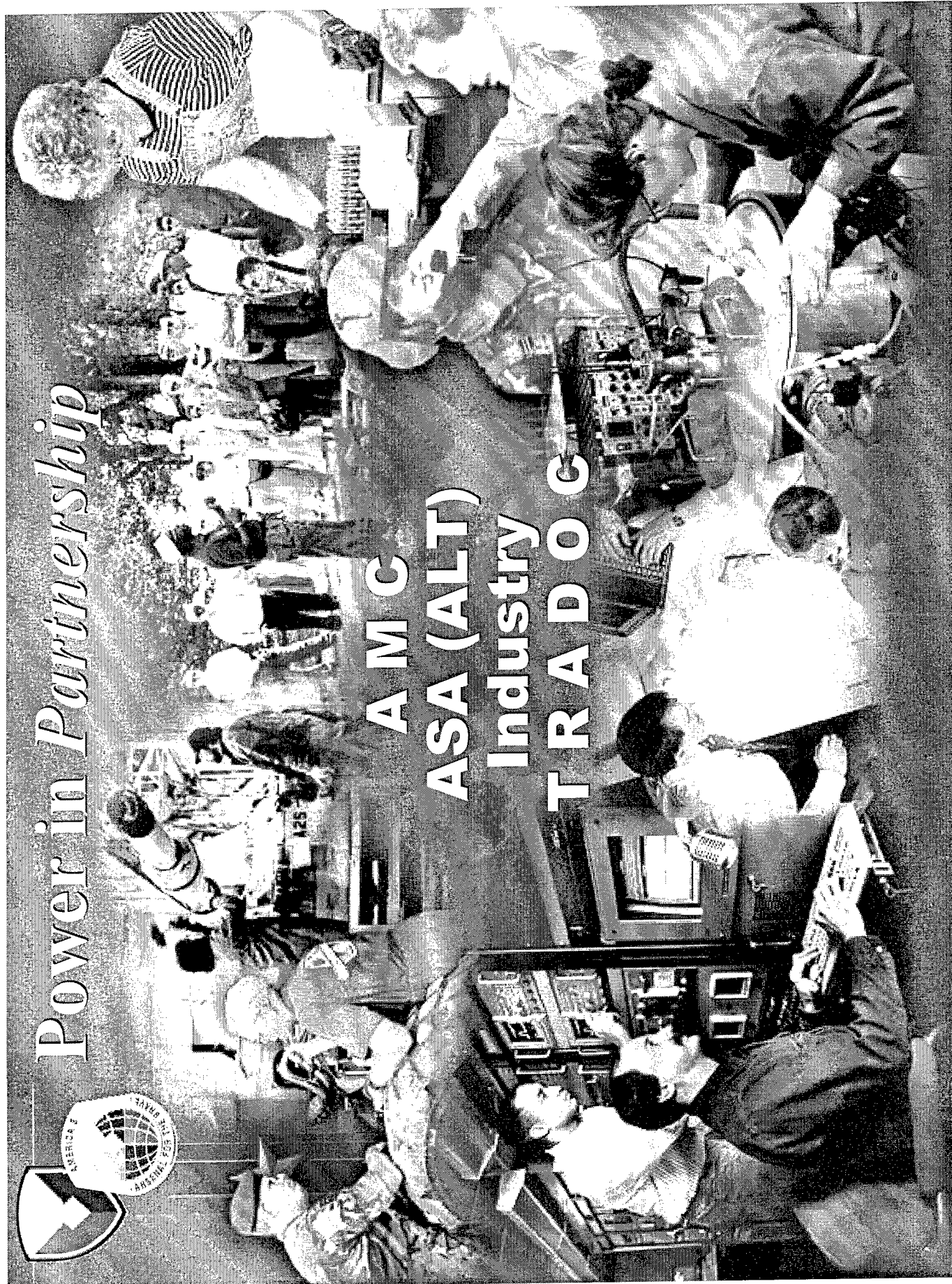
- ★ Kitchens and Food Service
- ★ Potable Water
- ★ Laundry Service
- ★ MSR Maintenance
- ★ CIF Repair

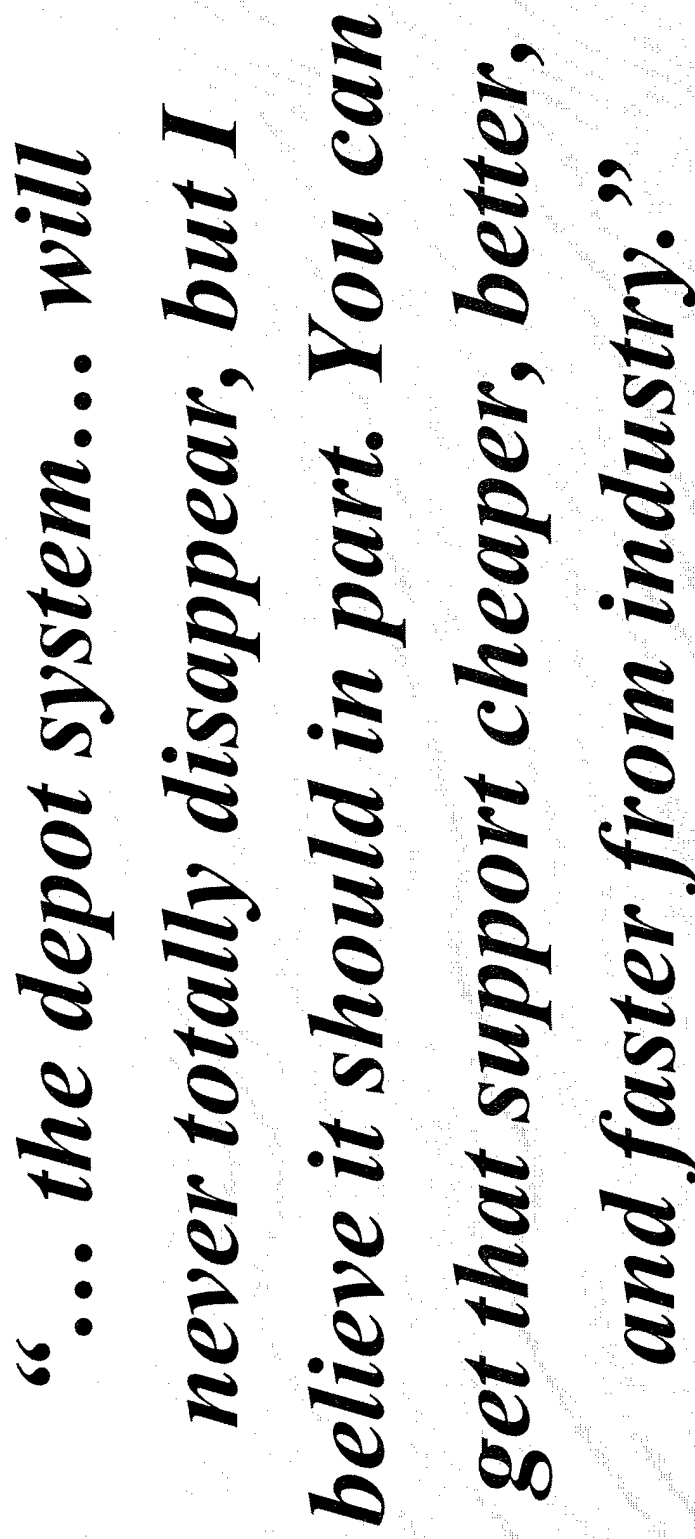




Power in Partnership

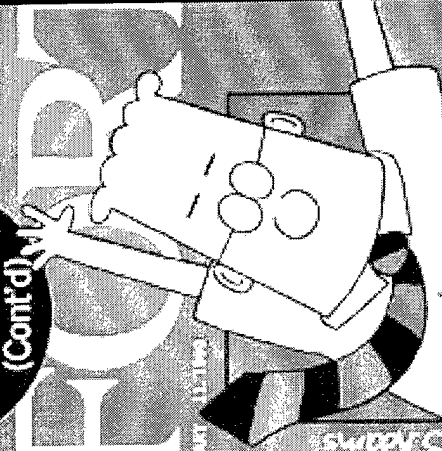
A M C
ASA (ALT)
Industry
T R A D O C





*“... the depot system... will
never totally disappear, but I
believe it should in part. You can
get that support cheaper, better,
and faster from industry.”*

The Microsoft
Diaries
(Cont'd)



INSIDE:

MEGAMERGER MANIA

*A Complete Scorecard Of
The Biggest M&A
Year Ever*

Citigroup:

Off to a Rocky Start

DaimlerChrysler:

The Germans Rule

Dumb Deals:

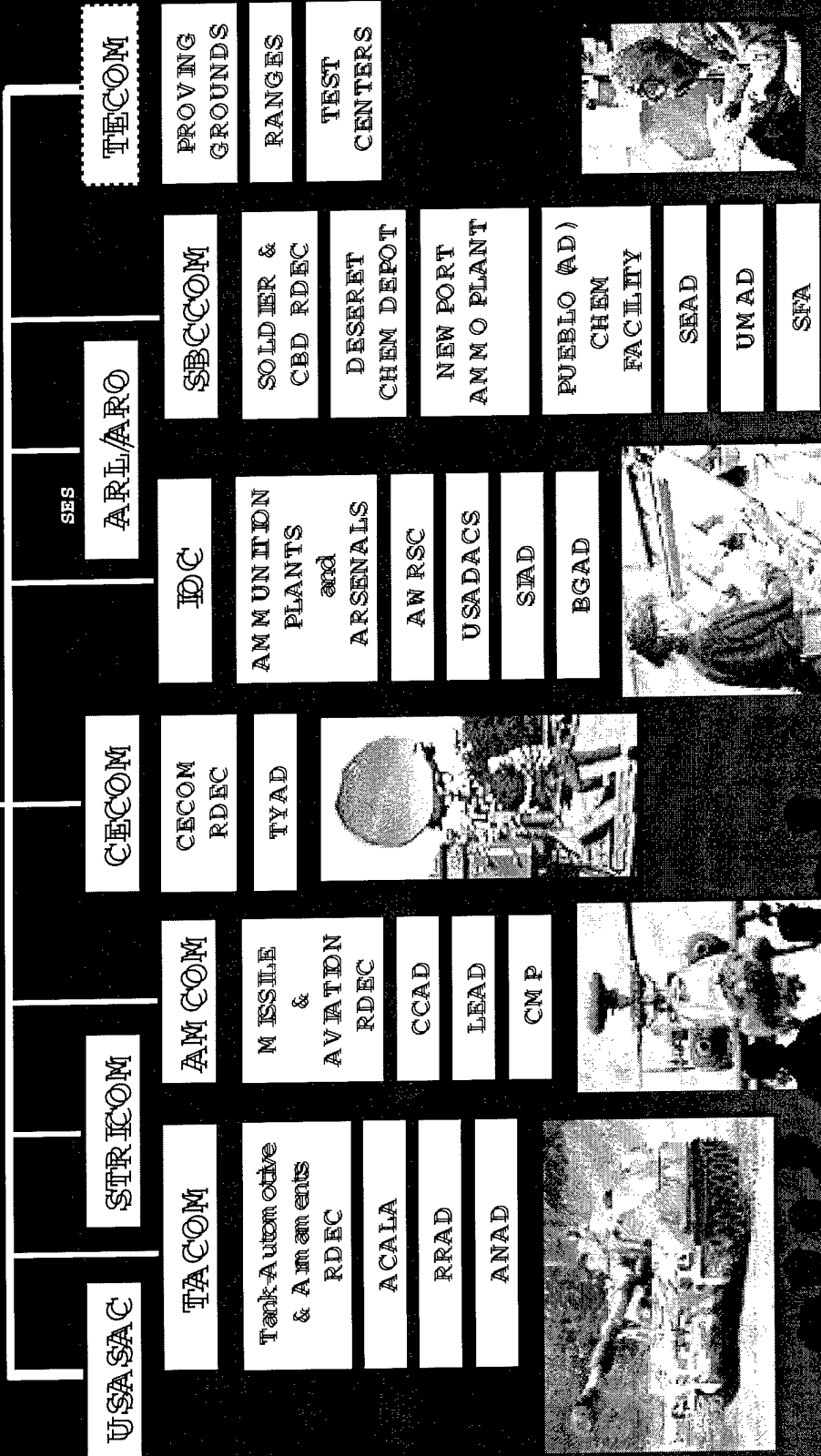
Investors Beware

FOR
Companies
extreme
investing
pushing
h-tech
now.

America's Arsenal For The Brave



HQ AMC



**Public Private
Competition**

Competitive Sourcing

**Leveraging
Information Technologies**

**Changing
Processes**

Reorganization

Expansion of Partnering

FY99 ALT/PLT Goals

Administrative Lead Time - 57
+ Production Lead Time - 188

Total

245 Days

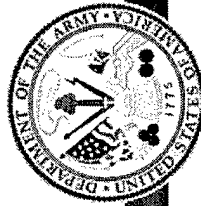
... and looking for 220 Days for FY00

E-Commerce: Your Link to Opportunity

Army Opportunities

Acquisition Business Web Site - Netscape

File Edit View Go Communicator Help



Acquisition Business Web Site

"Serving the U.S. Army Acquisition Community"

Army Contracting Opportunities

Your entry to all open Army Solicitations

Acquisition Business
Solicitations,
Executive Information System,
Electronic Commerce Links,
Solicitation Maintenance,
Registration and Feedback

Source Selection Resource Center
Obtain Source Selection Guidance:
Best Value
Past Performance
Oral Presentations
Debriefings

Acquisition Tool Set
* Web Browser Plug-ins

Acquisition Business

Select a site from the list below and press GO!

go

Source Selection Resource Center

To those who have provided easy access to global information has resulted in its explosive growth. Publishing information on the Internet is now common and relatively easy. However, conducting business using Internet technology is evolving commercially and is now a DOD directive. This site is the result of Army Web-based initiatives to apply Internet

This Web site has been established by (SARDA) as part of their Web-based Internet, providing an Executive Information System (EIS) access to procurement data; allowing remote site processing; integration of workflow into the procurement process; and definition of retail logistics interface requirements. The challenges include interfacing with the Standard Procurement System (SPS) and JEDMICS;

Acquisition Tool Set

Linked
to DoD



Document Done

E-Commerce: Your Link to Opportunity

*Linked
to DoD*



DoD Business Opportunities - Netscape

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop

Bookmarks Location: <http://www.dodbusapps.com/index.htm>

Instant Message Internet Lookup New&Cool RealPlayer

What's Related



**DEPARTMENT OF DEFENSE
BUSINESS OPPORTUNITIES**

FIND OPEN SOLICITATIONS

ARMY

AIR FORCE

NAVY/MARINES

DISA

DLA

DOING BUSINESS WITH THE DOD

SEARCH FOR WEB SITES

TEXT ONLY

PRIVACY DISCLAIMER

► **ACQUISITION INFORMATION** ► **SITE MISSION** ► **FEEDBACK** ► **HELP**

Document: Done

Navigation icons: Back, Forward, Home, Stop, Reload, Search, Netscape, Print, Security, Stop

Army Single Face to Industry

Locate Solicitations

Acquisition Business - Netscape

File Edit View Go Communicator Help



Acquisition Business

Directions

To search for solicitations:

- ✓ To view documents, you may need browser plug-ins. [Click here to select and download a plug-in.](#)
- ✓ Enter information into one or more of the fields.
- ✓ Select additional criteria from the pull-down lists.
- ✓ If criteria is entered for more than one field, the entries will be treated as AND conditions.

*The "02" character
Document Done

Search Criteria

Locate Solicitations where:

Contracting Office is:

ANY
ANY
Amament & Chemical Acquisition & Logistics Activity
Aviation & Missile Command - Aviation
Aviation & Missile Command - Missile
CECOM/USA Communications & Electronics Command
DAAC89
DAAND1
Fort Belvoir Military District of Washington Acquisition Center
Fort Campbell
Fort Meade
Fort Myer
Fort Stewart
Industrial Operation Command
Letterkenny Army Depot
McAlester Army Ammunition Plant
Medical Research Acquisition Activity - Ft. Detrick
Natick Contracting Division
Natick Contracting Division - Base Operations
Tank-Automotive & Amaments Command
Tooele Army Depot

✓ FSC Lookup

National Item Identification Number (NIIN) is equal to:

(NIIN is the last 9 characters of the National Stock Number)

Multiple Search Options



Army Single Face to Industry

Multiple Search Options



Acquisition Business - Netscape
File Edit View Go Communicator Help

Directions

To search for solicitations:

- ✓ To view documents, you may need browser plug-ins. Click here to select and download a plug-in.
- ✓ Enter information into one or more of the fields.
- ✓ Select additional criteria from the pull-down lists.
- ✓ If criteria is entered for more than one field, the entries will be treated as AND conditions.
- ✓ The "0" character may be used for wildcard queries (i.e. 12% will return all FSCs that begin with "12").

Locate Solicitations where:

Contracting Office is:

Solicitation Number is equal to:

Closing Date is: (Date format is DD-MON-YYYY (Example: 01-JAN-2000))

After and/or

Before

Standard Industrial Classification (SIC) is equal to:

(You may enter up to 10 codes separated by commas) / SIC Lookup

Federal Supply Code (FSC) is equal to:

(You may enter up to 10 codes separated by commas) / FSC Lookup

National Item Identification Number (NIIN) is equal to:

(NIIN is the last 9 characters of the National Stock Number (NSN))

Solicitation references this Noun:

Sort the output by

Document Done

Technical Data Packages

2398Q0887 - Netscape

Edit View Go Communicator Help

U.S. Army Aviation and Missile Command

Acquisition Center



Solicitation:

DAAH2398Q0887

Closing Date:

25-NOV-1998

POC:

DIANE IVY

256-955-9182

TDP



NSN

2840011779015

Noun

BLADE, TURBINE ENGINE

FINAL REPORT OF SERIAL NUMBER

TAMMS

Amendments

Attachments/Exhibits

Upload Attachments/Exhibits



[Return to Acquisition Center Contracting Information System](#)

Document Done

Request for Quotation (RFQ)

Netscape

File Edit View Go Communicator Help



Next Page Respond

REQUEST FOR QUOTATION (THIS IS NOT AN ORDER)

PAGE 1 OF 6

1. REQUEST NO. DAAH2398Q0887	2. DATE ISSUED 25-AUG-1998	THIS RFQ <input type="checkbox"/> IS <input checked="" type="checkbox"/> IS NOT A SMALL BUSINESS SET-ASIDE	3. REQUEST/PURCHASE REQUEST NO.	4. CERT. FOR NAT. DEF. UNDER EDSA REG. 2 AND/OR DMS REG. 1	RATING
5a. ISSUED BY DIANE IVY DODAAC:W50RCZ		6. DELIVERY BY (Date) SEE SCHEDULE			
5b. FOR MORE INFORMATION CALL (No Collect Calls)		7. DELIVERY <input type="checkbox"/> FOB DESTINATION <input checked="" type="checkbox"/> OTHER (SEE SCHEDULE)			
NAME DIANE IVY		9. DESTINATION			
AREA CODE 256		4. NAME OF COSIGNEE SEE SCHEDULE			
TELEPHONE NUMBER 9559182		b. STREET ADDRESS			
8. TO:		c. CITY			
a. NAME		d. STATE		e. ZIP CODE	
b. COMPANY		f. ZIP CODE			

10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE IN BLOCK 5A ON OR BEFORE CLOSE OF BUSINESS (Date)

IMPORTANT: This is a request for information, and quotations furnished are not offers. If you are unable to quote, please so indicate on this form and return it to the address in Block 5A. This request does not commit the Government to pay any costs incurred in the preparation of the submission of this quotation or to contract for supplies or services. Supplies are of domestic origin unless otherwise indicated by quote. Any representations and/or certifications to this Request for Quotations must be completed by the quote.

25-NOV-1998

II. SCHEDULE (Indicate applicable Federal, State and local laws)

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)
	SEE SCHEDULE				

Form Ready

Submit Your Response...

SAFETY TESTING - Microsoft Internet Explorer

File Edit View Go Links Help

Back Forward Stop Reload Home Favorites Mail Print

Address: [http://www.dau.mil/procurement/submit_response.asp](#)

Page: 1 of 1

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Vendor Information	Company ID: Acquisition
Submission Address	Address:
Business/Changes	USO
Attachments List	
Registration	
Live Item Info	

Copyright © 2000

File Edit View Go Links Help

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All Secure
All Paperless



U.S. Army Acquisition Center

Acknowledgment

Your bid for REQ DAAM2298Q0087 was received on Tue Apr 13 13:09:51 Pacific Daylight Time 1999

Thank you for your submission. | Back to top page |

...And Receive Acknowledgement

FY99 ALT/PLT Goals

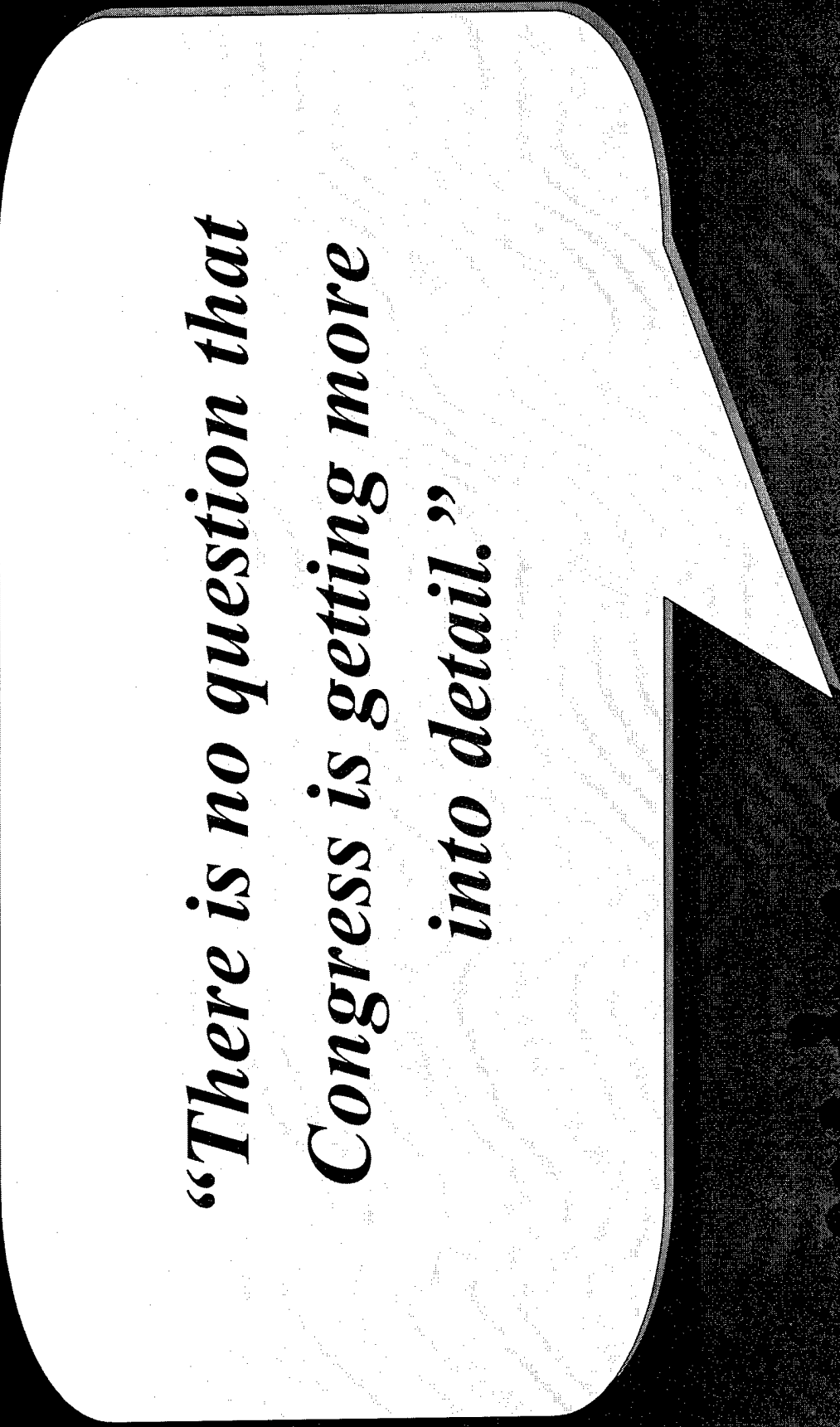
Administrative Lead Time - 57

+ Production Lead Time - 188

Total

245 Days

... and looking for 220 Days for FY00



*“There is no question that
Congress is getting more
into detail.”*

- ★ **Over Capacity**
- ★ **Unnecessary Infrastructure**
- ★ **Acquisition Reforms**
- ★ **“Corporate” Best Value Decisions**
- ★ **Big Changes**
 - Wholesale Logistics Modernization
 - Revolution in Financial Affairs
 - Move Out on Initiatives
 - Fleet Management
 - Apache Prime Vendor
- and Many More...**

Total Ownership Cost Reduction

TAV PVS CAIV

HTI FM MTS NBO

Partnering

TOCAS

*Alpha
Contracting*



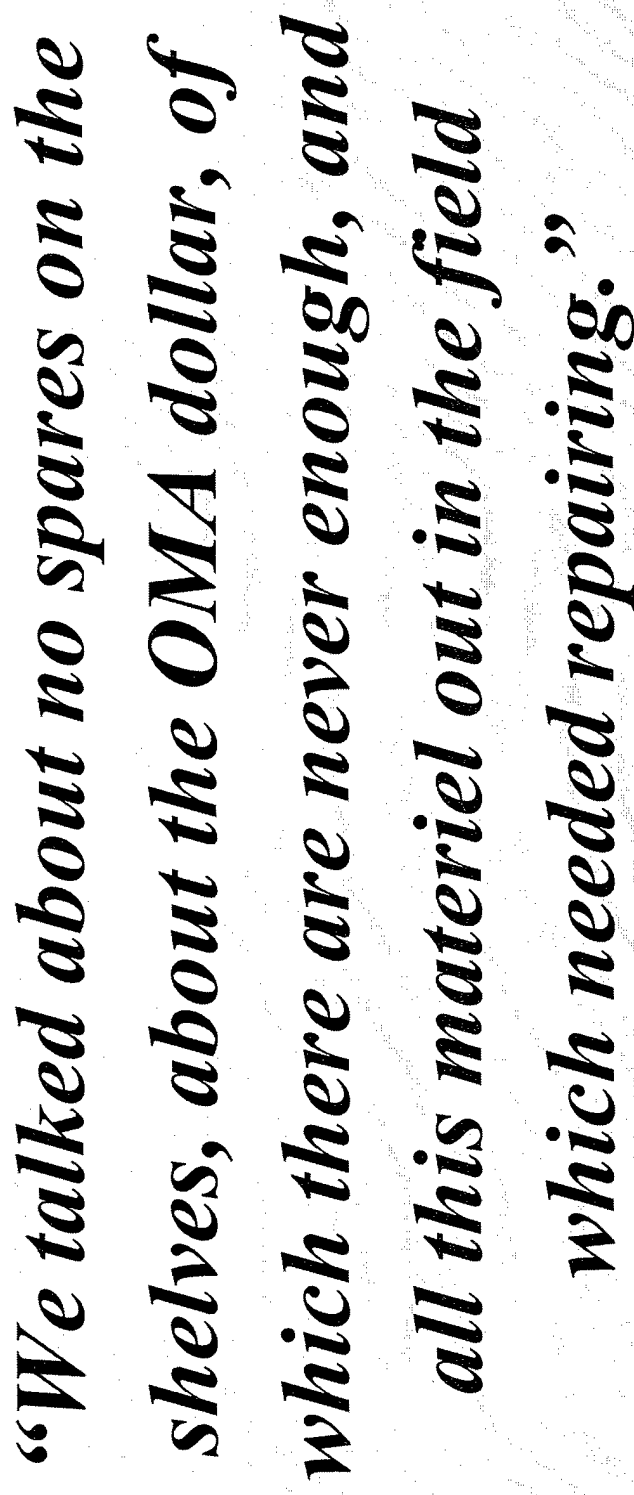
Common TMDE

912C / 816

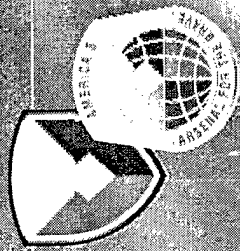
PPBS Revision

DVD LCCM EC/EDI OSCR

SCMA ABC/M COSSI

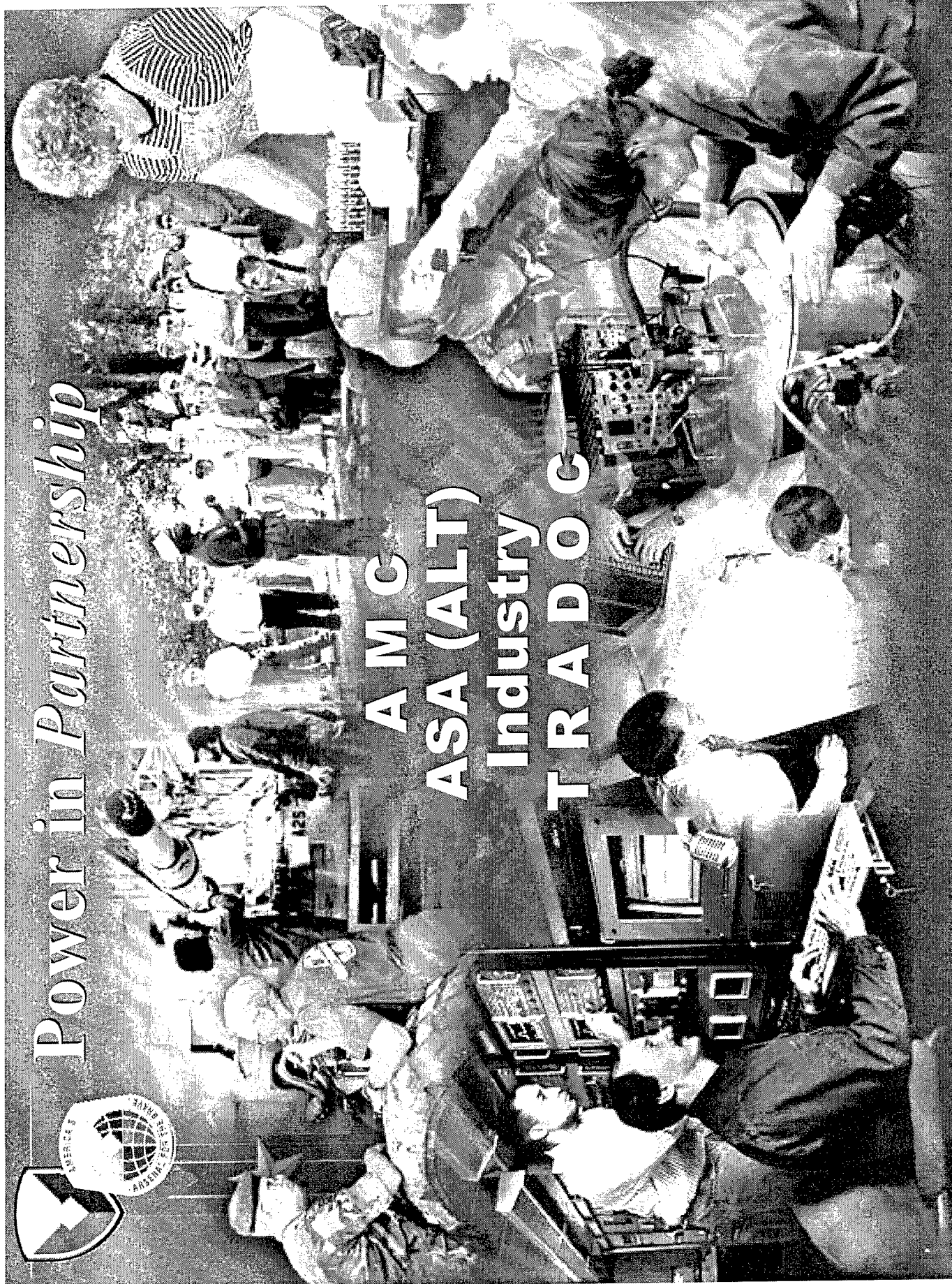


“We talked about no spares on the shelves, about the OMA dollar, of which there are never enough, and all this materiel out in the field which needed repairing.”



Power in Partnership

A M C
ASA (ALT)
Industry
T R A D O C



– Geographical Locations –

030

Logistics Power Projection

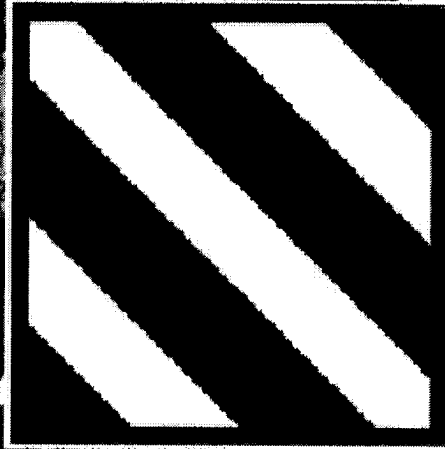
ON TO THE
21st CENTURY



ARMY STRATEGIC MOBILITY PROGRAM

RAIL
MARSHALLING
AREA

RAILROAD
PASS
TRACK

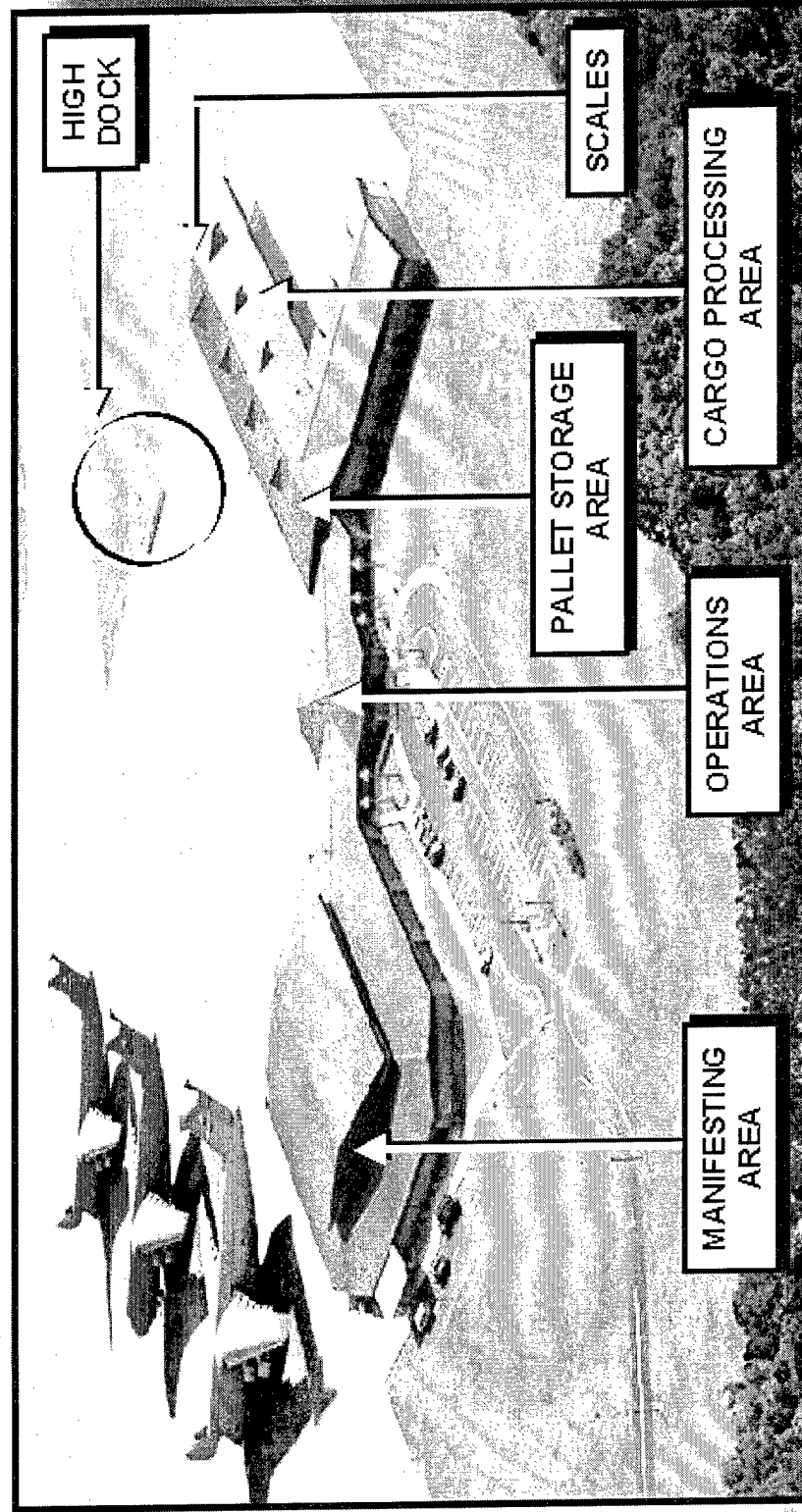


CONTAINER
HANDLING
FACILITY

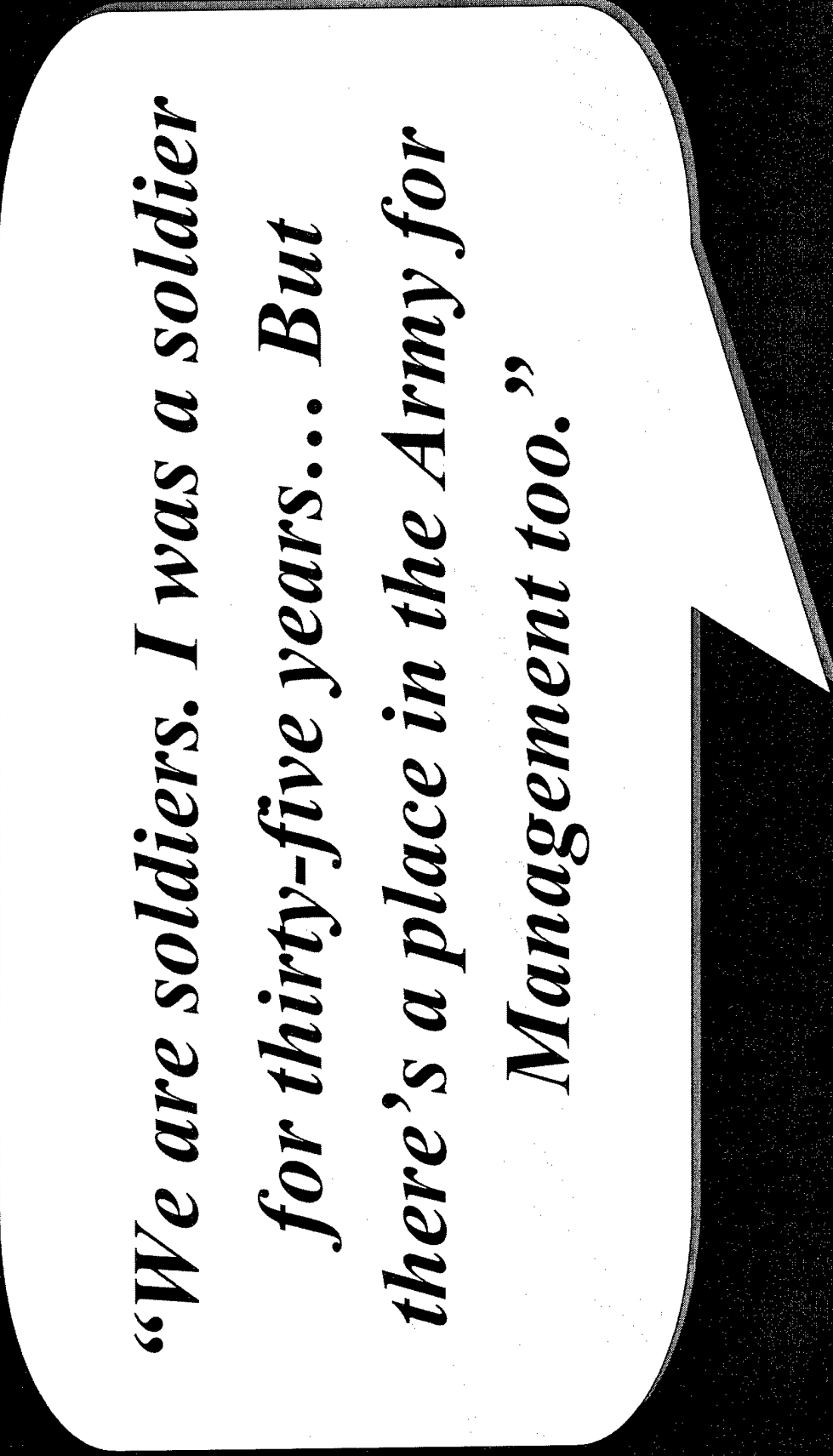
AMMO
SUPPLY POINT
EXPANSION

Power Projection

TRUSCOTT DEPARTURE/ARRIVAL AIRFIELD CONTROL GROUP FACILITY



TOTAL COST: \$8.4 MILLION



*“We are soldiers. I was a soldier
for thirty-five years... But
there’s a place in the Army for
Management too.”*



LTG George Sammit, Jr.

United States Army, Retired

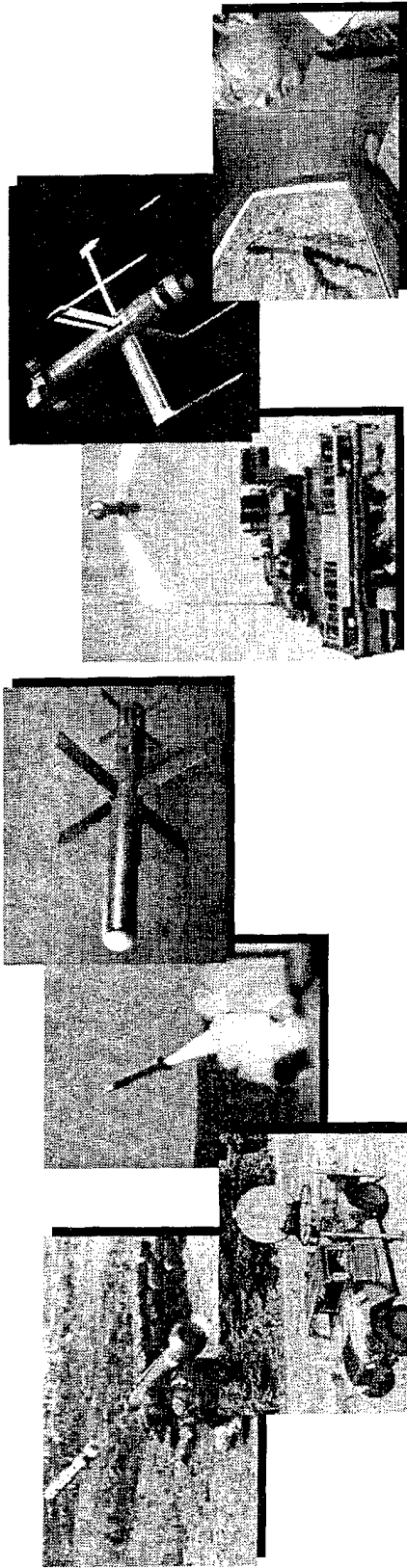




What are you doing for the soldier of 2020?

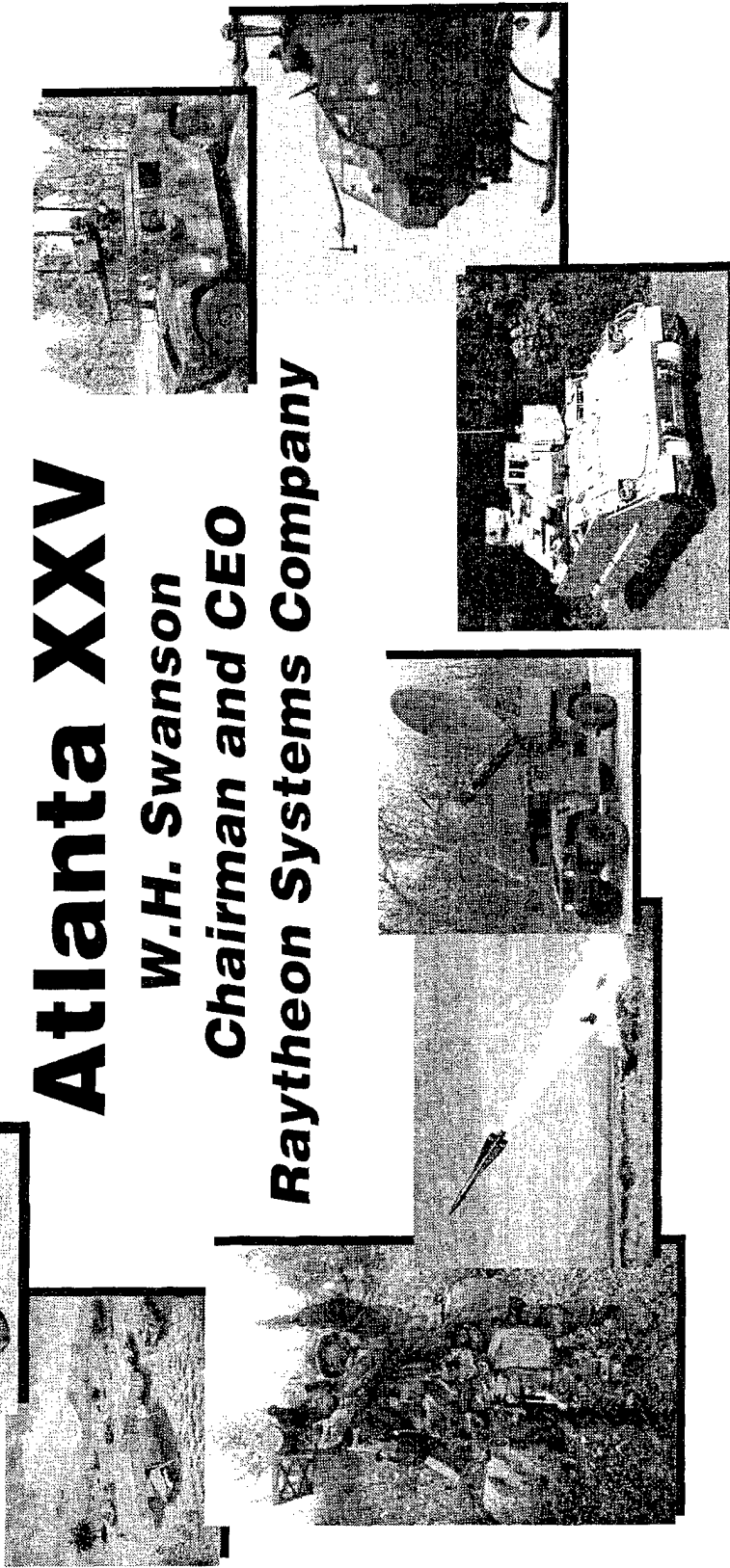
Army After Next - *Take us there.*





Atlanta XXV

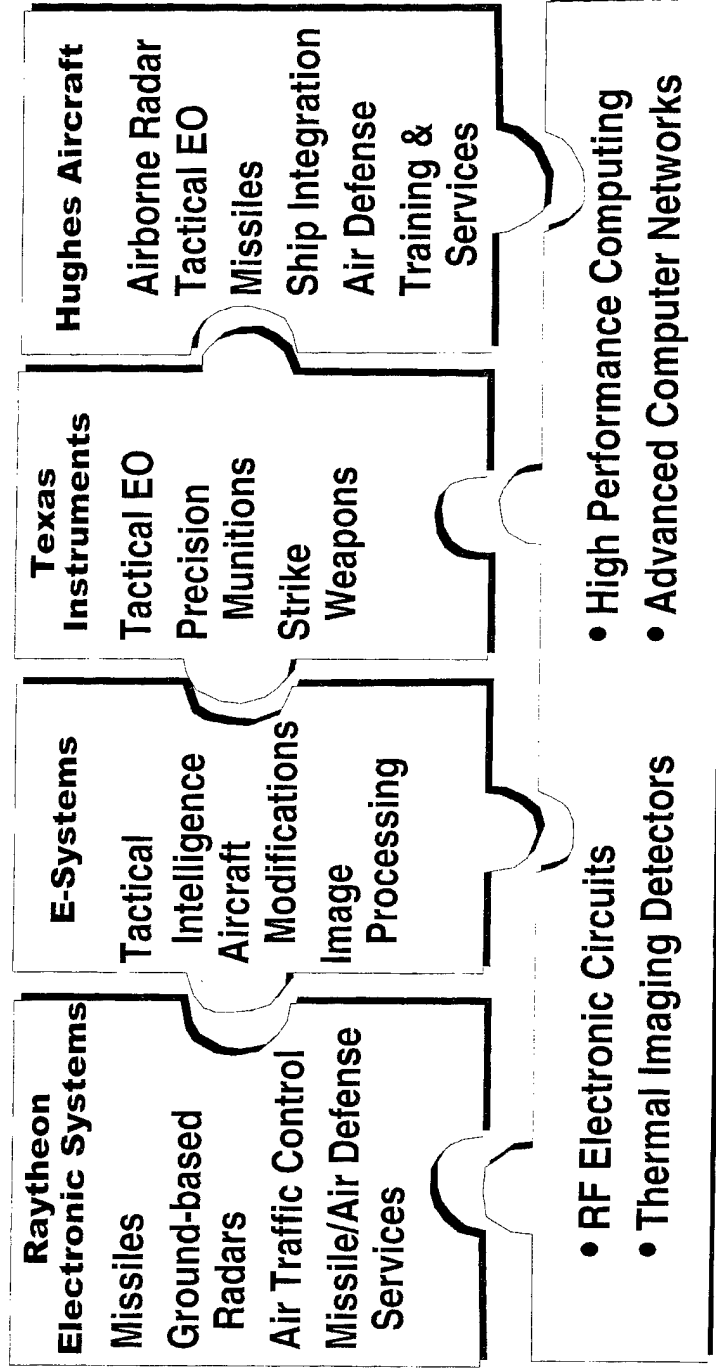
W.H. Swanson
Chairman and CEO
Raytheon Systems Company



Companies

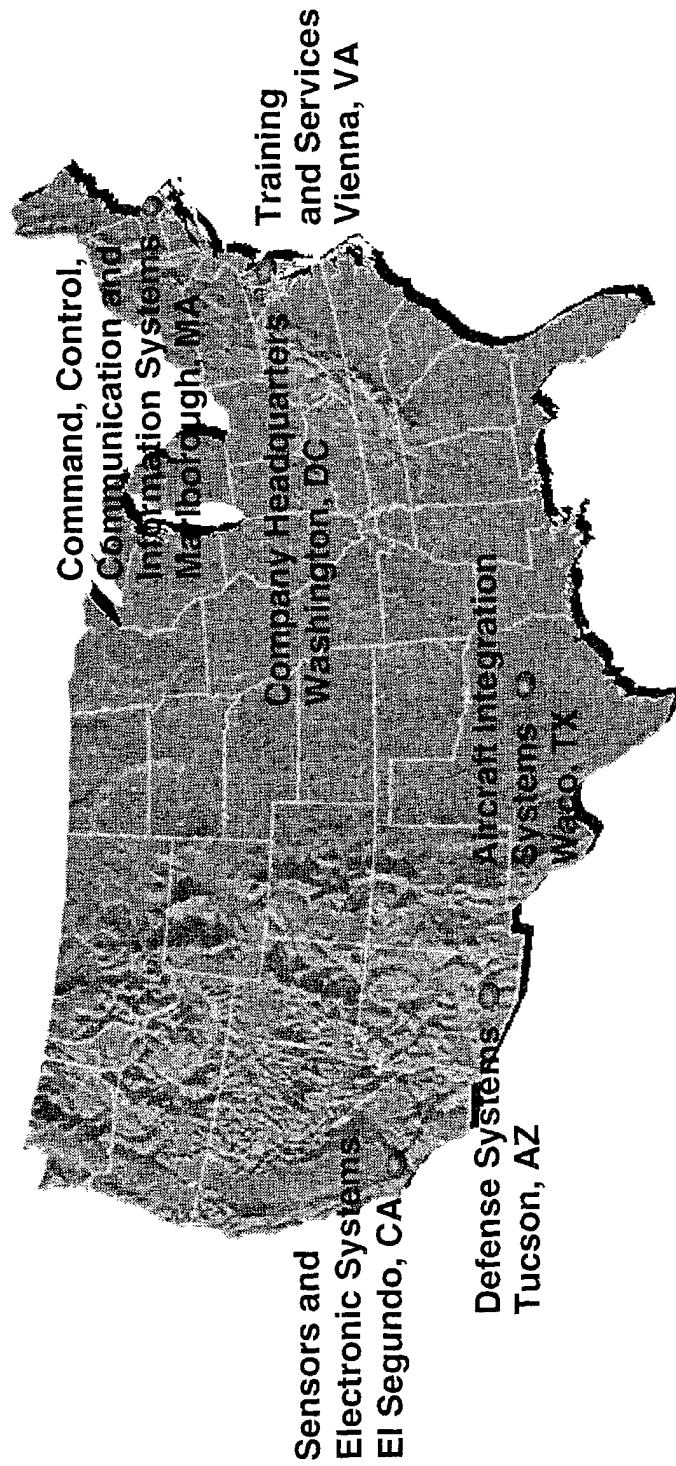
Market
Leadership

Technology
Leadership



Leadership in Defense Electronics

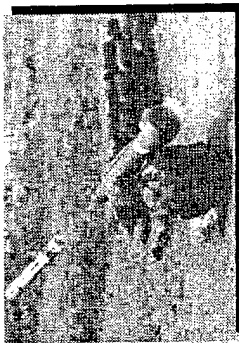
Raytheon Systems Company Headquarters Locations



Defense Systems



Patriot



Javelin



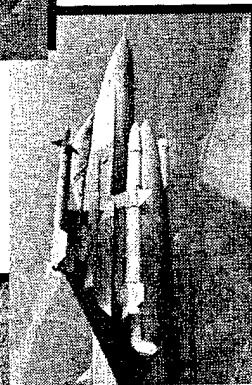
GBR



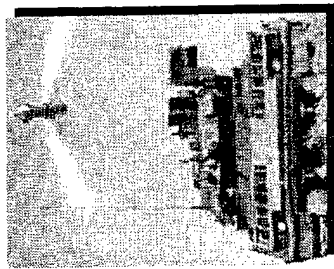
Stinger



NMD



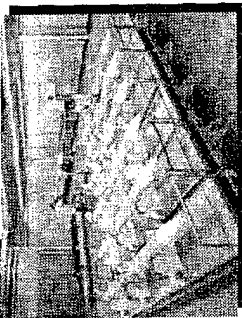
HARM



TOW



Hawk AMRAAM



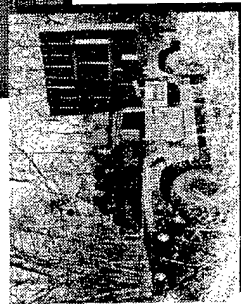
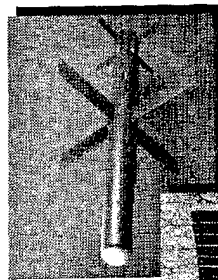
AMRAAM



Tomahawk

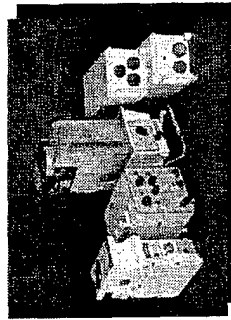


BAT



E-FOG-M

Sensor and Electronic Systems



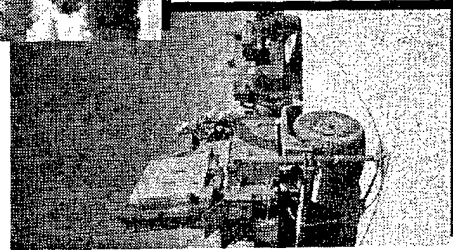
International Tank
Sights and Lasers



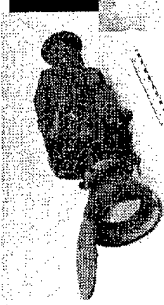
Digital Receiver
Technology



Bradley



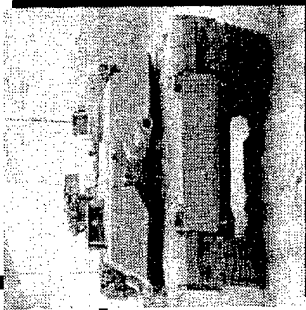
Sentinel



Thermal
Weapons



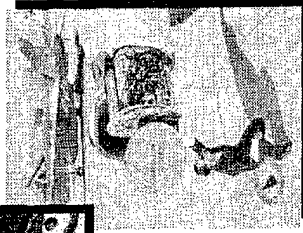
Thermal Weapon Sight



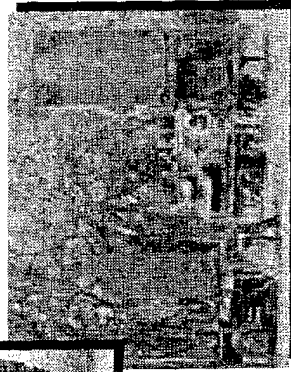
Abrams Tank
EO



Cobra EO
Fire Control

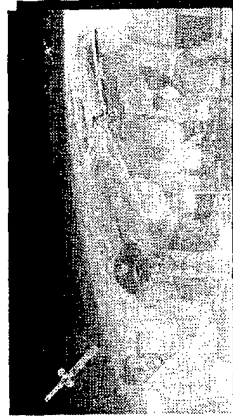
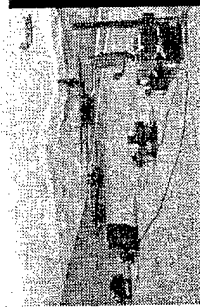
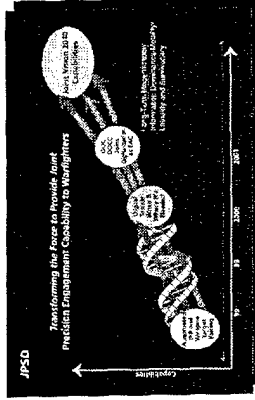
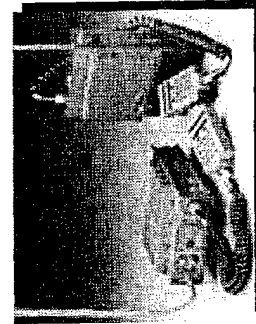
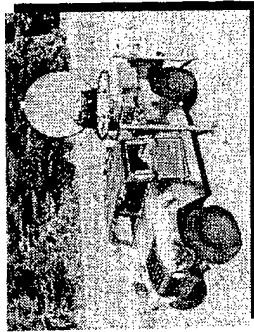


F18 Radar

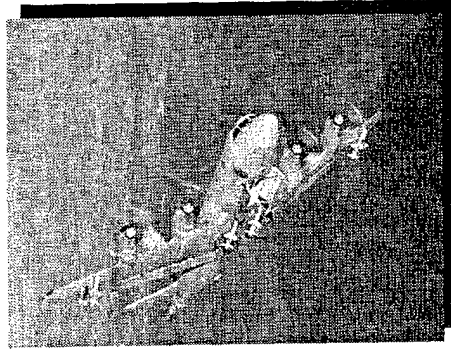


Firefinder

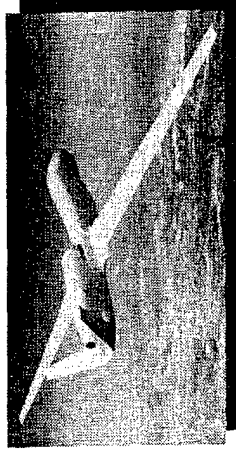
Command, Control, Communication and Information Systems



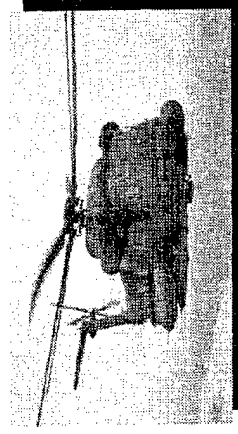
Aircraft Integration Systems



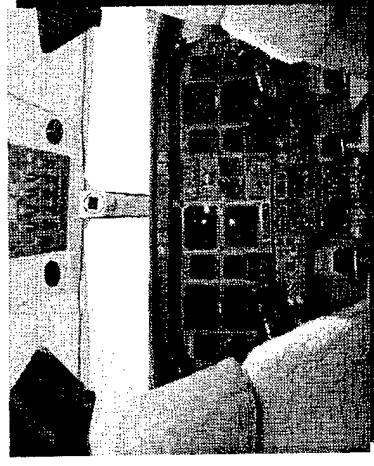
**Maritime Patrol
Aircraft**



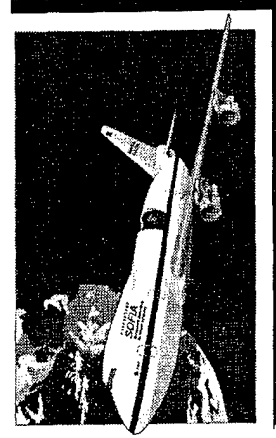
UAV



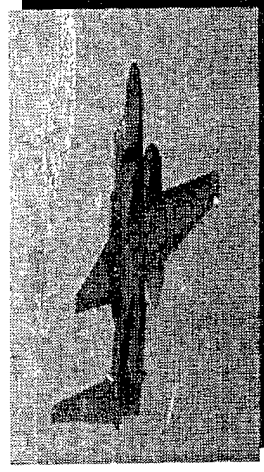
**Special Operations
Support**



Aircraft Modification



**Stratospheric
Observatory**

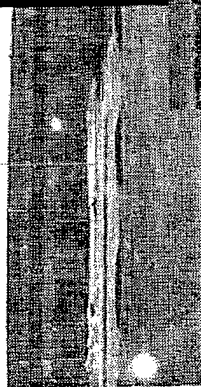


Airborne Surveillance

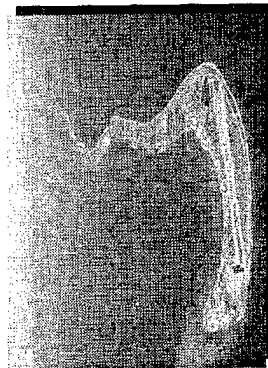
Training and Services



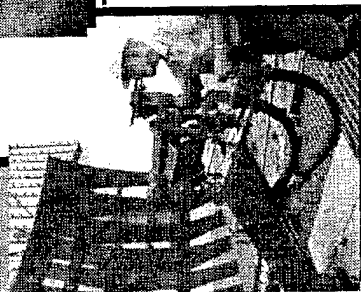
Depot
Services



Facility
Maintenance



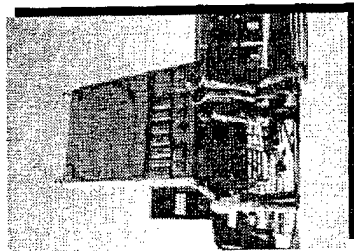
Technical Support



Field Engineering



Range Operations



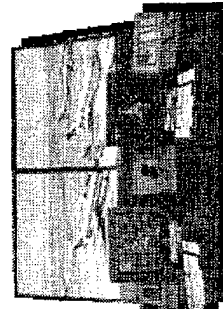
Logistics
Engineering



Training
Support



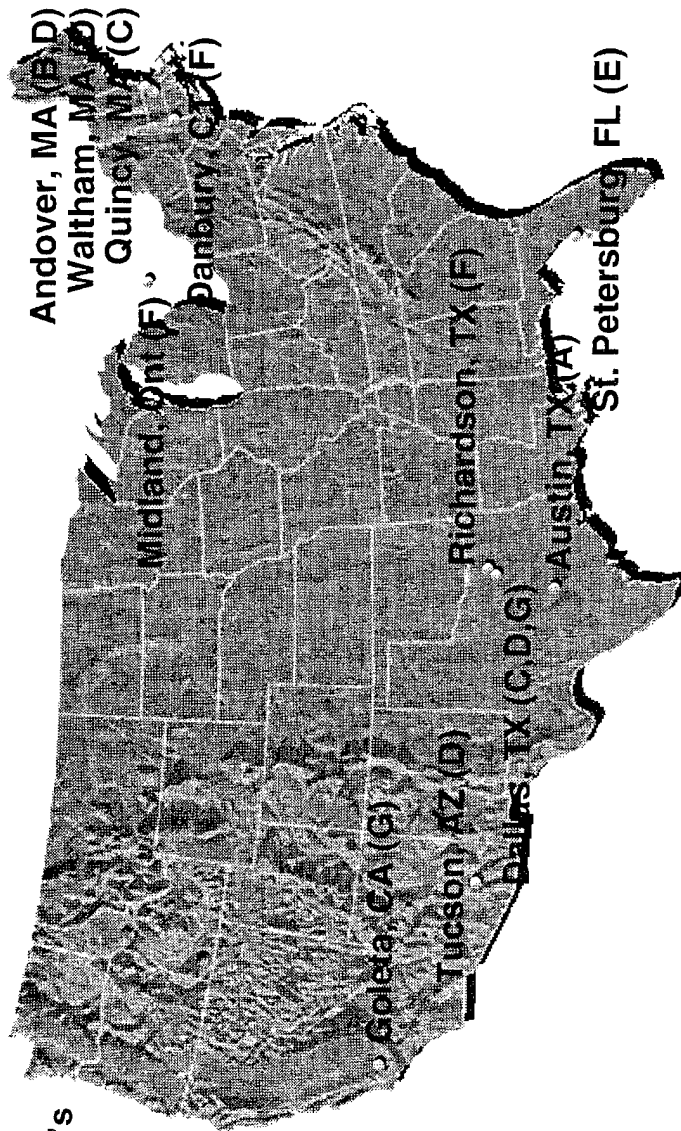
Training Systems



ATC Support

Centers of Excellence

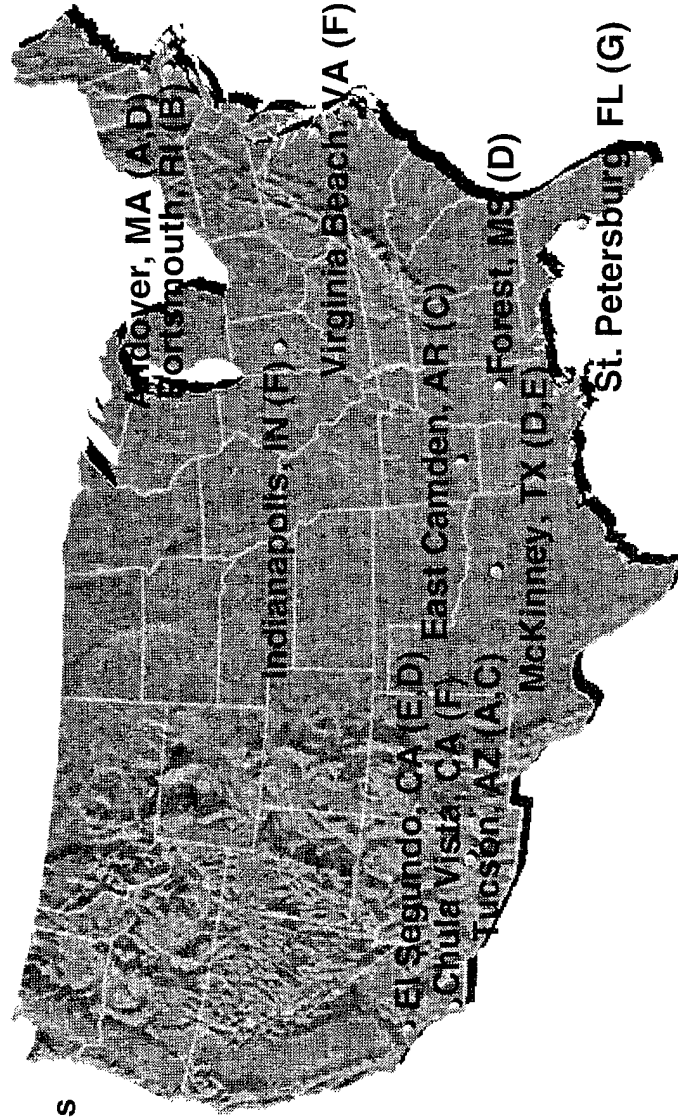
	Current Locations	COE's
(A) Printed Wiring Board Fabrication	6	1
(B) Circuit Card Assembly	19	1
(C) Microelectronics	11	2
(D) Metal Fabrication	15	4
(E) Cables	10	1
(F) Optics	3	3
(G) EO Components/Coolers	4	2



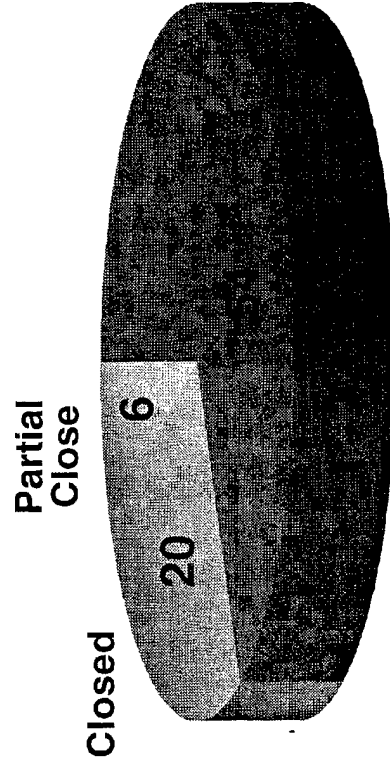
Centers of Manufacturing

Current Locations COE's

- | | | |
|------------------------|-----|---|
| (A) Missiles/ | 5 → | 2 |
| Strike Weapons | | |
| (B) Torpedoes, Ship | 4 → | 1 |
| Combat Systems | | |
| Sonar, Mine | | |
| Warfare, and Ocean | | |
| Surv. Systems | | |
| (C) All Up Round | 5 → | 2 |
| (D) Radar | 6 → | 4 |
| (E) Electro-Optical | 4 → | 2 |
| (F) Depots | 7 → | 3 |
| (G) Radio and Terminal | 5 → | 1 |



Facilities Restructuring



Closed

8M ft²

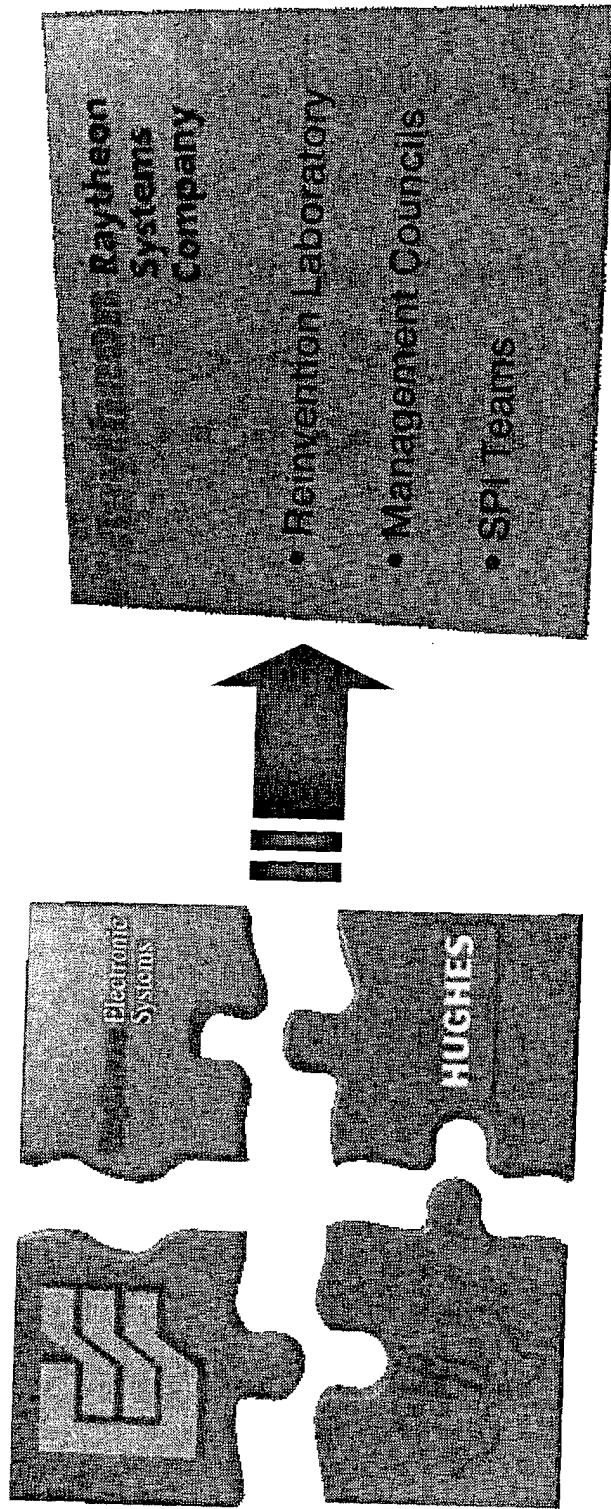
Major Facilities

- 80 Major Facilities to 60
- Partial Closure of An additional Six Major Facilities

Facilities Square Footage

- 42M ft² to 34M ft²
- 20% Reduction

Acquisition Reform



Ongoing Commitment to Reform

32 Approved SPI Projects

Assembly and Inspection

- 1 Deletion of Solderability Testing
- 2 Delete MIL-STD-2000, Delete Cosmetic Rework
- 3 Delete MIL-STD-2000, Reduce Solder Inspection
- 4 Delete ECP Requirements for Class 2 Changes
- 5 Contractual Requirements Acceptance Test Reduction
- 6 Part is a Part Contractual Requirements
- 7 Contract Document Disclosure
- 8 Reduce Inspection
- 9 Eliminate DoD-STD-100 Specification Control Drawings
- 10 Eliminate Annual Certification of Test Stations
- 11 Eliminate Customer's External Audits
- 12 Eliminate Contract Need for On-Sheet Parts List
- 13 Eliminate MIL-STD-15206 MRB Presentation

Business System Summary

- 14 Reduce Cost Reporting on Contracts
- 15 Combine Spares Procurements
- 16 Final Overhead Negotiations
- 17 Contract Terminations
- 18 Combined Requisitions

Government Property Summary

- 19 Inventory & Control of Government Property
- 20 MIL-STD-45662A Calibration Requirements

Proposal Summary

- 21 Certification of Cost and Pricing
- 22 Spares Bidding
- 23 Termination Proposals
- 24 Forward Pricing Rate Agreements
- 25 Subcontractor Audits

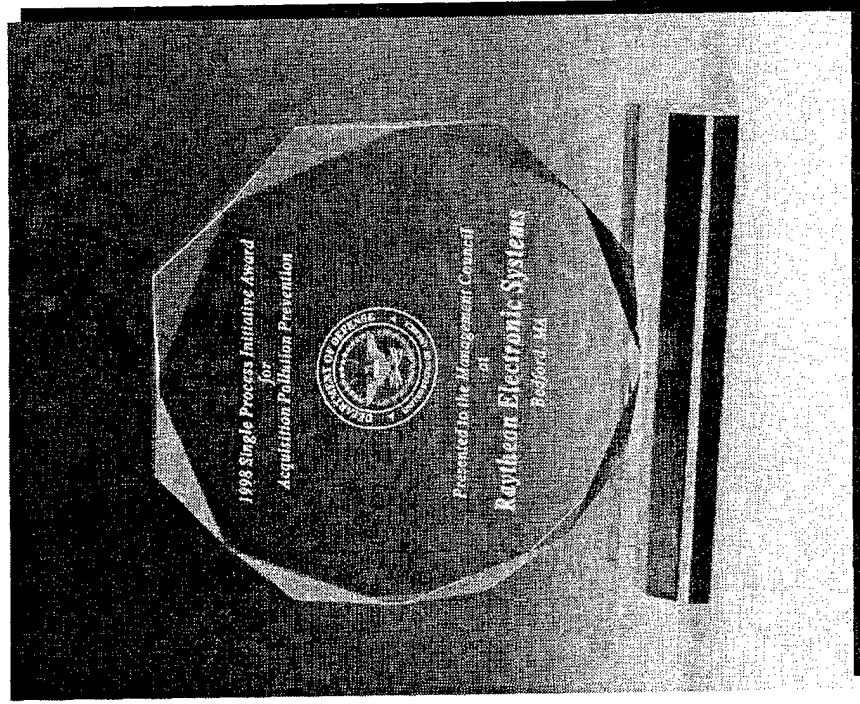
Procurement

- 26 Subcontract Terminations, FAR Change
- 27 Small Business Plans, FAR Changes
- 28 Annual Certification
- 29 Eliminate Rescreening Requirements
- 30 Remove Packaging Requirements

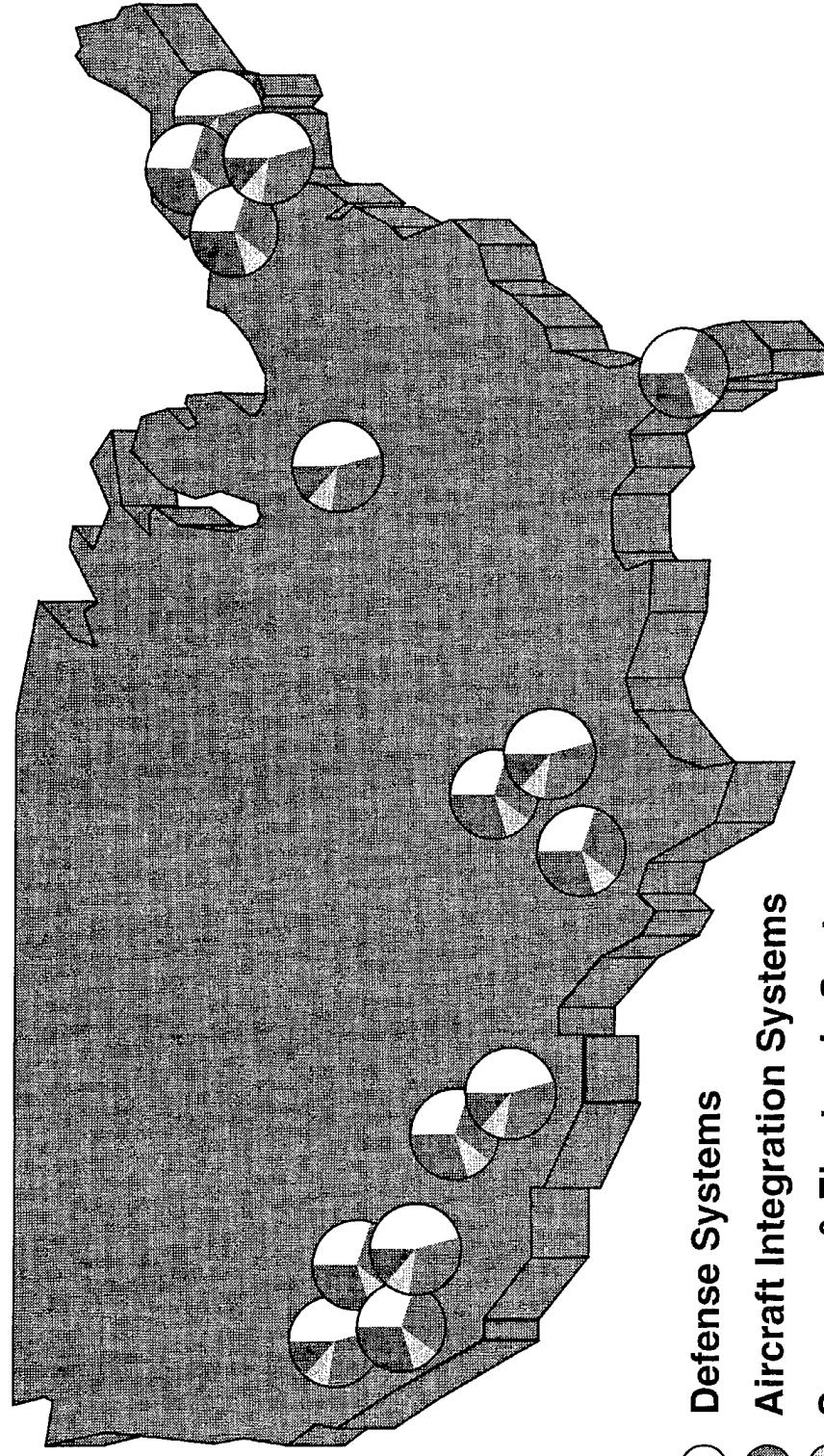
Concurrent Sales Summary

- 31 Eliminate Contractual Mandatory Government Inspection Requirements
- 32 ISO 9001

DCMC SPI Recognition Award



Previous Management Councils



○ Defense Systems

● Aircraft Integration Systems

● Sensors & Electronic Systems

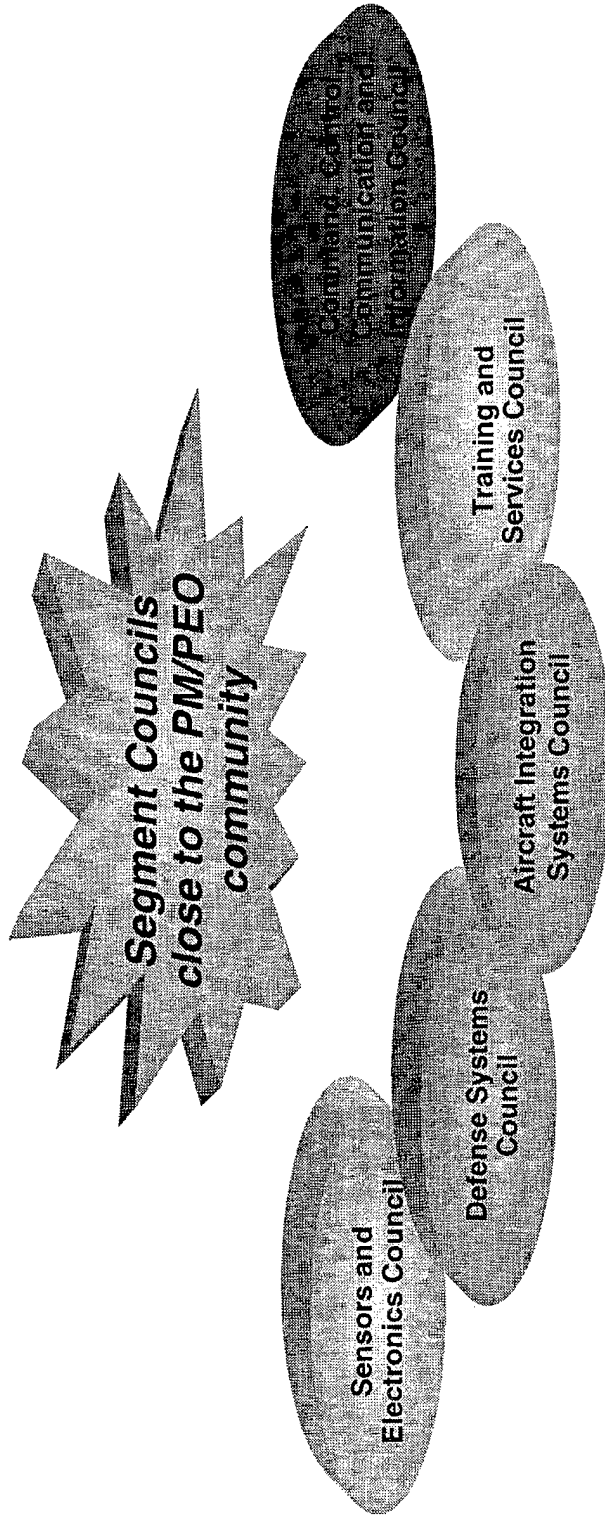
● Command, Control, Communication and Information Systems

• Structure inconsistent with RSC Segment structure

• Councils not facility specific

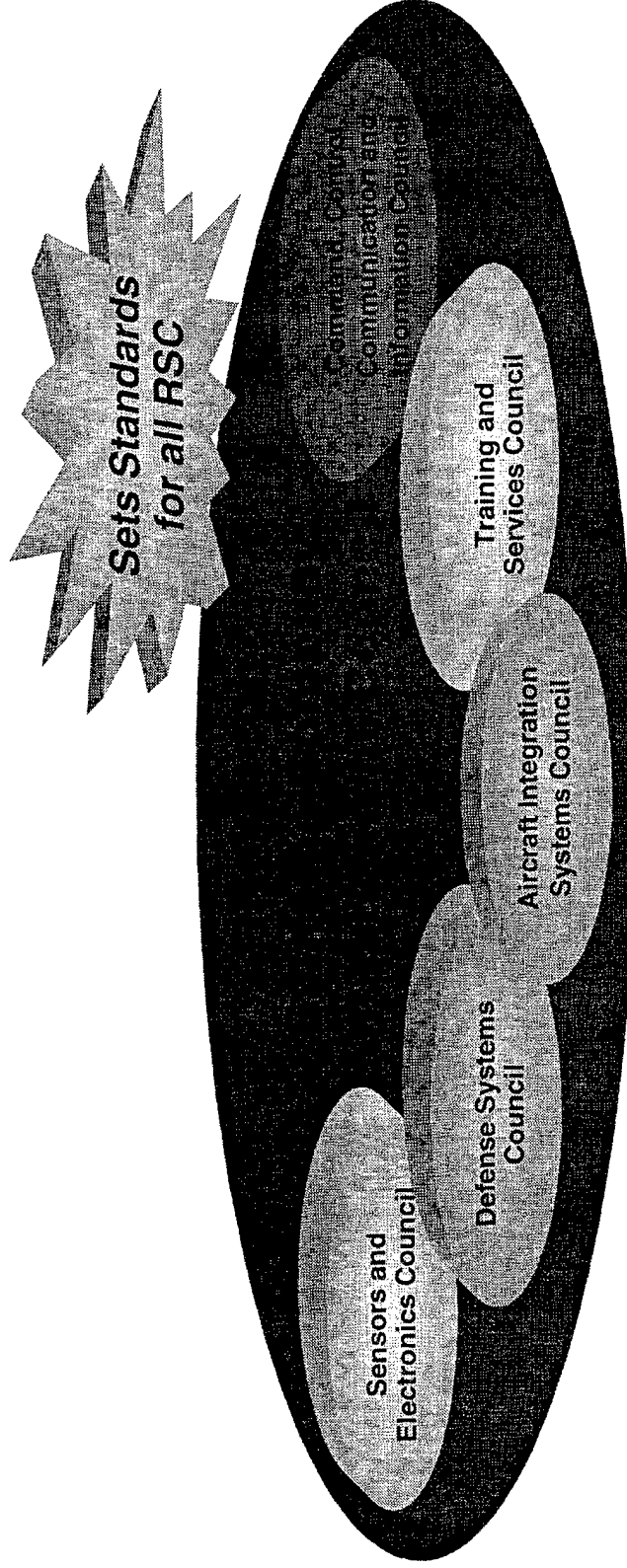
• Segments geographically spread

RSC Management Council Structure



Commitment to Acquisition Reform

Integrated RSC Management Council Structure



Acquisition Reform Initiatives

- PROCAS**
- EVMS**
- DoD Past Performance**
- RSC Transition and details**
- Integrated Digital Environment (IDE)**
- Environmental Initiatives**
- Streamlined Acquisition**
- Other topics of interest to the Councils**

Contractor On The Battlefield

ITAS Acquisition Reform Model

CONTRACT REFORM

- Performance specifications for field replaceable items
- RSC controls detailed design data
- Fly-to-Buy
- Key metrics monitored, contractor controls processes

HARDWARE REFORM

- Full Built-In-Test capability
- Plastic encapsulated microcircuits
- Industrial parts
- Controlled use of COTS items
 - RSC Part Selection Process
- Commonality requirements (IBAS)

PROGRAMMATICS

- Formal Cost Reduction Plan
- Multiyear contracts for:
 - Production
 - Engineering Services
 - Prime Vendor Support
- Alpha Acquisition

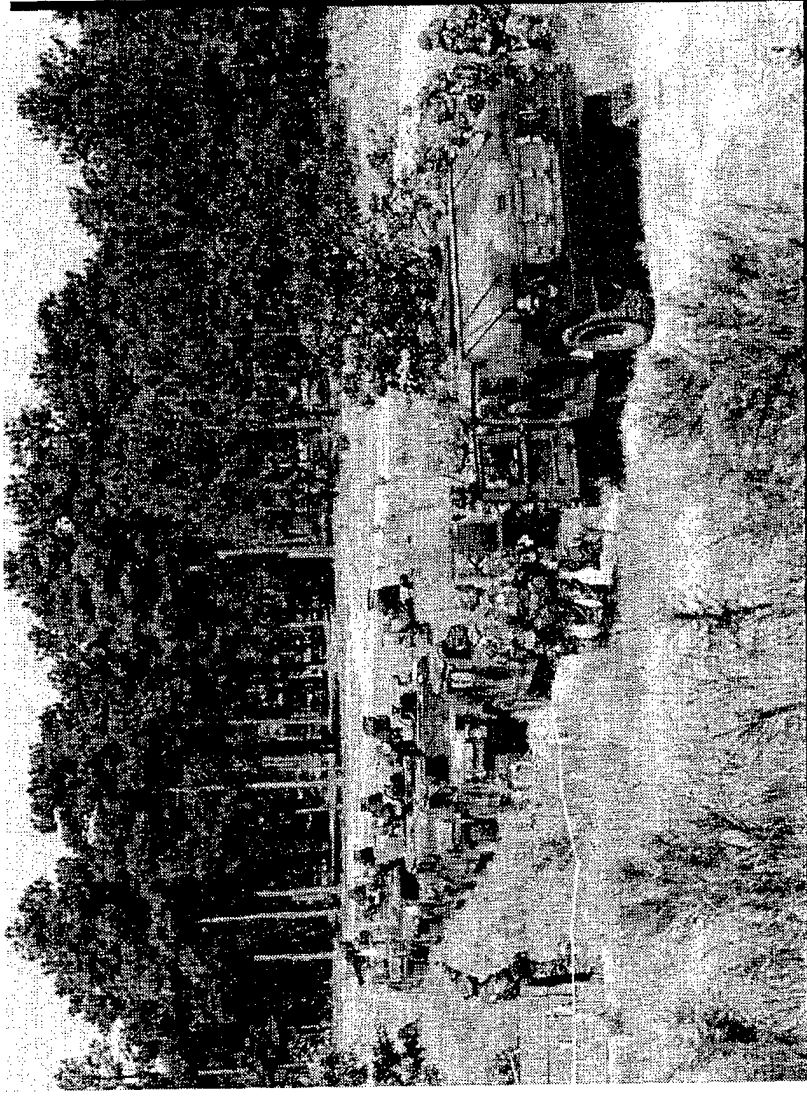
LIFE CYCLE SUPPORT

- Contractor Logistics Support at major fielding sites
- Common factory/depot facility and equipment
- Guaranteed system availability

ELECTRONIC COMMERCE

- On-line submission of CDRL's and Technical data
- Logistics data integrated with Army Log Systems

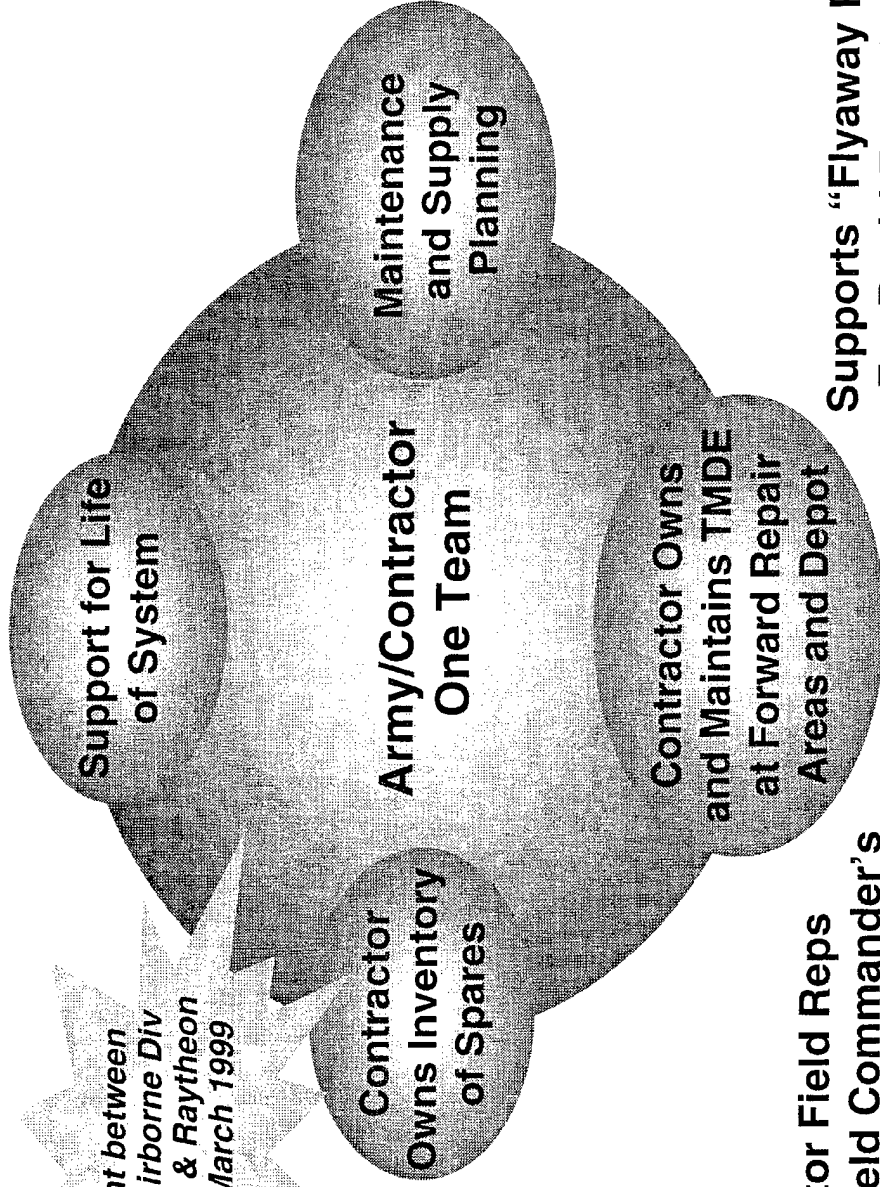
TOW Improved Target Acquisition System (ITAS)



The 82D Airborne's 1-17 CAVALRY with their new TOW ITAS anti-armor systems.

Contractor Integrated with the Unit to Support the Warfighter

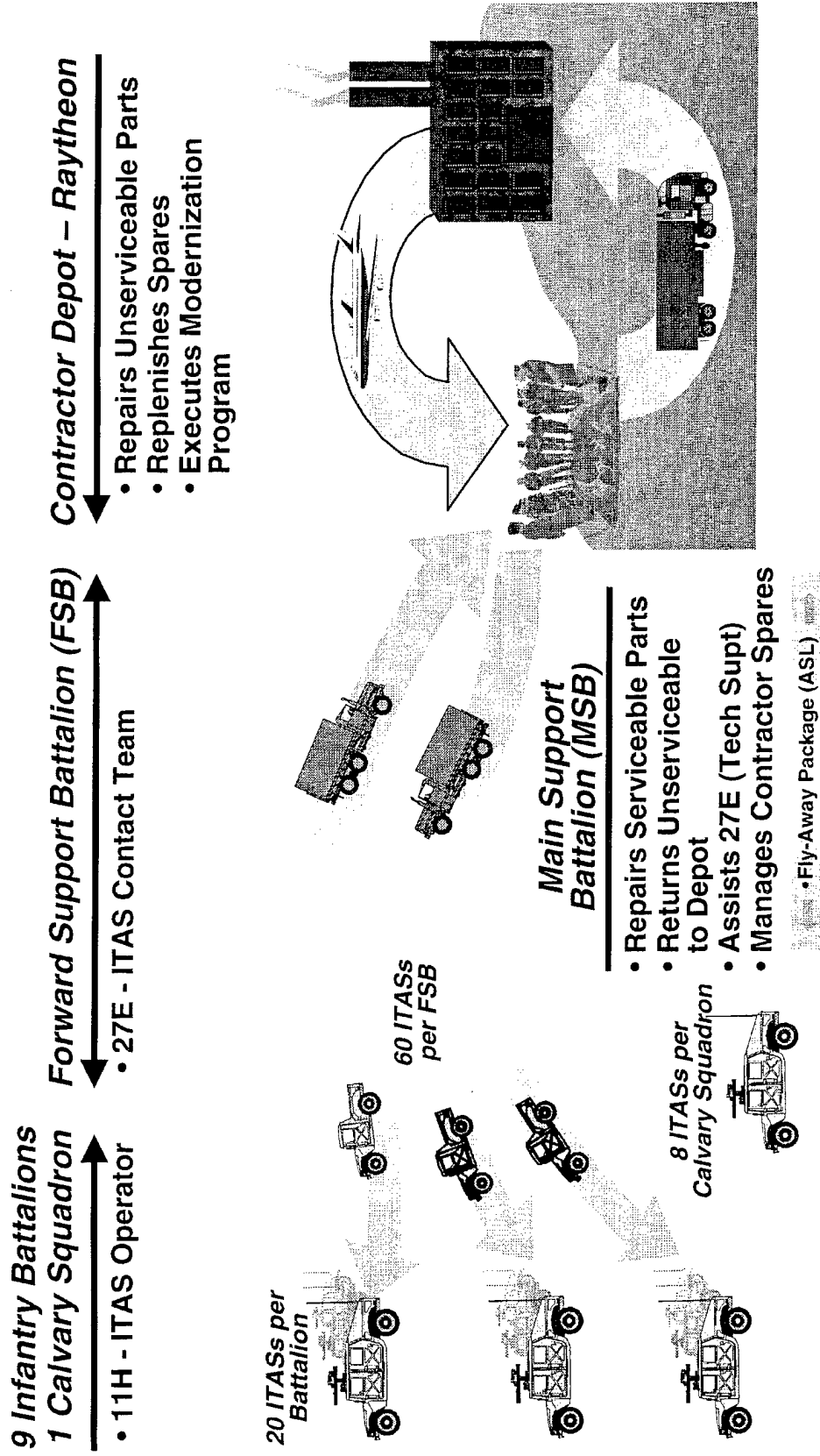
Agreement between
the 82D Airborne Div
PM CCAWS & Raytheon
Dated 22 March 1999



Contractor Field Reps
subject to Field Commander's
control at all times

Supports "Flyaway Packages"
For Rapid Force Deployment

ITAS CLS for the 82D A/B Div



For ITAS, the Army's Care-Abouts Have Been Addressed with the Agreement Between the PM, the 82D and Raytheon

U.S. Army Care-Abouts

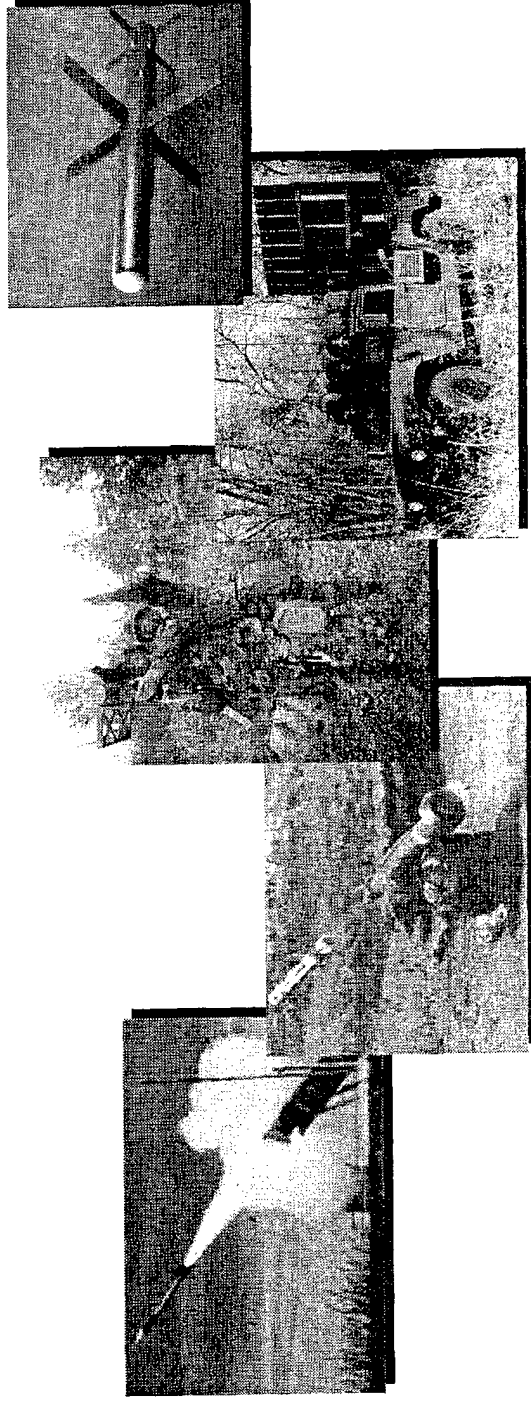
- ☐ War Planning/Force Multiplier
- ☐ Seamless Transition to War
- ☐ Responsiveness of Support
- ☐ Support to Contractors
- ☐ Deployment Requirements
- ☐ Control in Battle
- ☐ Technical Support

Contractor as Team Member

- ☒ Member of War Planning Council
- ☒ Total Integration of RSC into Support Plan
- ☒ RSC Located with Units/Incentive Contract
- ☒ Provided by Unit through the agreement
- ☒ Health/Physical/Legal Requirements met
- ☒ RSC Rep under Commander's Authority, SOFAs & UCMJ
- ☒ Skilled Technicians drawn from both Industry and former Military Pools

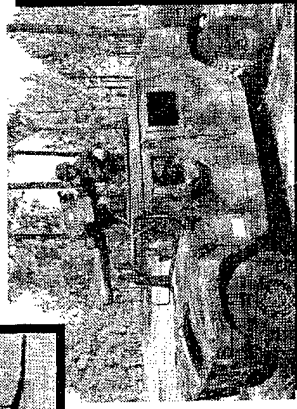
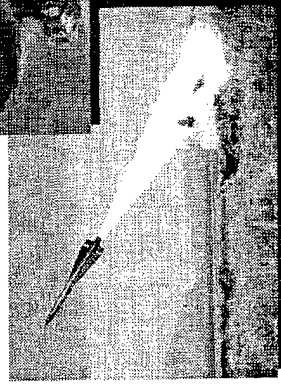
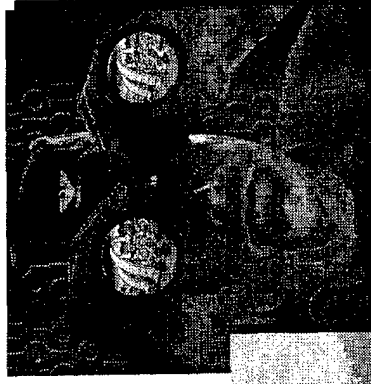
Acquisition Reform Issues

- *SPI process*
- *Commercialization*
- *Unique business requirements*
- *Contract terms and conditions*



Acquisition Reform Success

- *New opportunities*
- *Partnering between industry and the Army*
- *Streamlining*
- *Teamwork*



Commitment to Reform

[illegible]

Atlanta XXV History in the Making

GEN(R) Louis Wagner

History In The Making

**Forum For Former Decision Makers To Review
Previous Issues And Show How These Issues
Provide A Framework To Continue The Evolution
Of Government/Industry Relationships**

Materiel Acquisition Issues - 1976 To 1989

- Small Budget to Large Budget to Decreasing Budget
- Critical Modernization Requirements
- Huge "Bow Wave"
- Hollow Army - Equipment Readiness Problems
- Congressional Criticism
- Distrust of Government Testing
- Depot Initiatives Stymied
- Poor Quality of New Equipment
- Packard Commission
- "ILL WIND" - Lawyers Reignited Supreme

"It's Deja Vu All Over Again"

Acquisition Initiatives - 1976 To 1998

- **PMs Had Extensive Operational Experience**
- **Increased User Input - TRADOC System Managers**
- **Increased "Green Suiter" Input To Soldier Systems**
- **Increased Contractor Knowledge Of User - NTC**
- **Total Program Support By Prime Contractor - MSE**
- **Increased Contractor Support - Particularly Aviation**
- **Depot Performance Enhancement**
- **Objective Supply System (OSS) - Fort Hood**
- **Common Items And Supply Depots To DLA**
- **In Transit/Total Asset Visibility - But Too Slow**

AN OUTSIDER'S VIEW OF AMC TODAY

- Not Enough "Green Suiters" To Influence The Action
- Management Of Suppliers Is Key Focus
- Increased Reliance On Contractors In All Areas
- Decreased Emphasis On Acquisition Expertise
- Many Good Initiatives
 - Velocity Supply Management
 - State-Of-The-Art In-Transit/Total Asset Visibility
 - Paperless Contracting
 - Streamlined RFPs (?)

Too Few People For Too Many Jobs?



AAI Corporation

A subsidiary of United Industrial Corporation

HISTORY IN THE MAKING

An Industry Viewpoint

G. J. Kersels

**Vice President, General Manager
Defense Systems**

20 April 99



AAI Corporation
A subsidiary of United Industrial Corporation

PERFORMANCE EXPECTATIONS

Process
Focused

1990s &
Beyond

Build to Spec

1970s &
1980s

Performance
Driven

1960s

4/20/99 2



CONTRACT EXPECTATIONS

Best Value

**1990s &
Beyond**

Fixed Price

**1970s &
1980s**

Cost Plus

1960s

4/20/99 3



AAI Corporation
A subsidiary of United Industrial Corporation

GOVT/INDUSTRY RELATIONSHIPS

Partnerships

1990s &
Beyond

Adversarial

1970s &
1980s

Collaborative

1960s

4/20/99 4



AAI Corporation
A subsidiary of United Industrial Corporation

CURRENT STATE

ARMY

Warfighters

Combat Experts

Support

Logistics

Maintenance

INDUSTRY

Primes

Experts at weapon
platforms

Support Specialist Companies

Training experts

Contractor Life

Cycle Support

4/20/99 5



FUTURE INDUSTRY APPROACH

Option A

Prime
Platform
Training
Contractor Life
Cycle Support

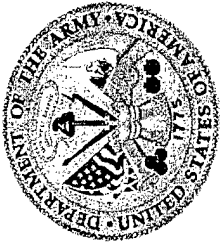
Vertical
Integration

4/20/89 6

Option B

Prime
Platform
Support Specialist
Training
Contractor Life
Cycle Support

*Competition
Innovation
Lower Cost*



ATLANTA XXV

Safeguarding The Exchange Of Information In An Open Environment

Mr. David Borland

Vice Director of Information Systems for Command,
Control, Communications and Computer

20 April 1999

Purpose

- Provide an overview of how Government and Industry will safeguard the exchange of classified/proprietary information in their business dealings.

Agenda

- Background
- Terms and Definition
- Bottom Line Up Front
- Context
- Classes of Attacks Against Network Systems
- Business Rules for Access Control (Current & Future)
- Business Scenarios (Current and Future)
 - Solicitation and Awards
 - Electronic Catalogs (E-Catalogs) and Electronic Mall (E-Mall)
 - Technical Drawing Process
- Public Key Infrastructure
- DoD Medium Assurance Public Key Infrastructure
- Target DoD PKI Architecture for Interoperability
- Target User Registration
- Challenges and Opportunities
- RECAP

Background

Paperless Contracting:

- 21 May 97: Management Reform Memorandum (MRM) #2, "Moving to a Paper-free Contracting Process by January 1, 2000"
- 29 Jul 97: MRM #2 Addendum (included the Logistics function)
- 8 Dec 97: MRM #2 Reemphasis (provides focus, details monthly briefs)

Public Key Infrastructure (PKI):

- 8 Aug 97: Management Reform Memorandum (MRM) #16, "Identifying Requirements for the Design, Development and Implementation of a DoD Public Key Infrastructure."
- 19 Aug 97: ASD(C3I) Memorandum, "Public Key Infrastructure (PKI) Services for the Defense Information Infrastructure (DII)"
- April 99: Draft ASD(C31) Policy Memorandum, Department of Defense (DoD) Public Key Infrastructure (PKI)

Web Based Security:

- 24 Sep 98: DEPSECDEF Memorandum, "Information Vulnerability and the World Wide Web"
- 20 Oct 98: Principal Deputy USD(A&T) Memorandum, "Information Vulnerability and the World Wide Web"
- 30 Nov 98: Army DISC4/CIO Memorandum, "Guidance for Management of Publicly Accessible U.S. Army Web-sites"

Definitions and Terms

Army Electronic Commerce (EC): Electronic techniques for accomplishing business transactions, including electronic mail or messaging, World Wide Web technology, electronic bulletin boards, purchase cards, electronic funds transfers, and electronic data interchange.

Army Single Face to Industry (ASFI): A web based electronic contracting system that provides direct interface with the Army's procurements systems and provides a centralized entrance point for industry

Public Key Infrastructure (PKI): The people, policy, procedures, hardware and software components, and facilities necessary to enable public key cryptographic functions, so that applications can provide the desired electronic commerce and security enhancements.

Digital Signatures: A process using public key cryptography whereby a user can electronically sign an electronic transaction. The digital signature can be validated as genuine and the signed transaction cannot be altered without detection.

Identity Certificates: An electronic file with a specific validity period that certifies that the named user is who he or she claims to be, and binds the user's public key with the named user. The certificate cannot be altered without detection.

Electronic Mall (E-Mall): A virtual shopping mall the provides DoD Customers the ability to order items electronically.

Army Mart (A-MART): Army World-Wide-Web front end to the DoD E-Mall

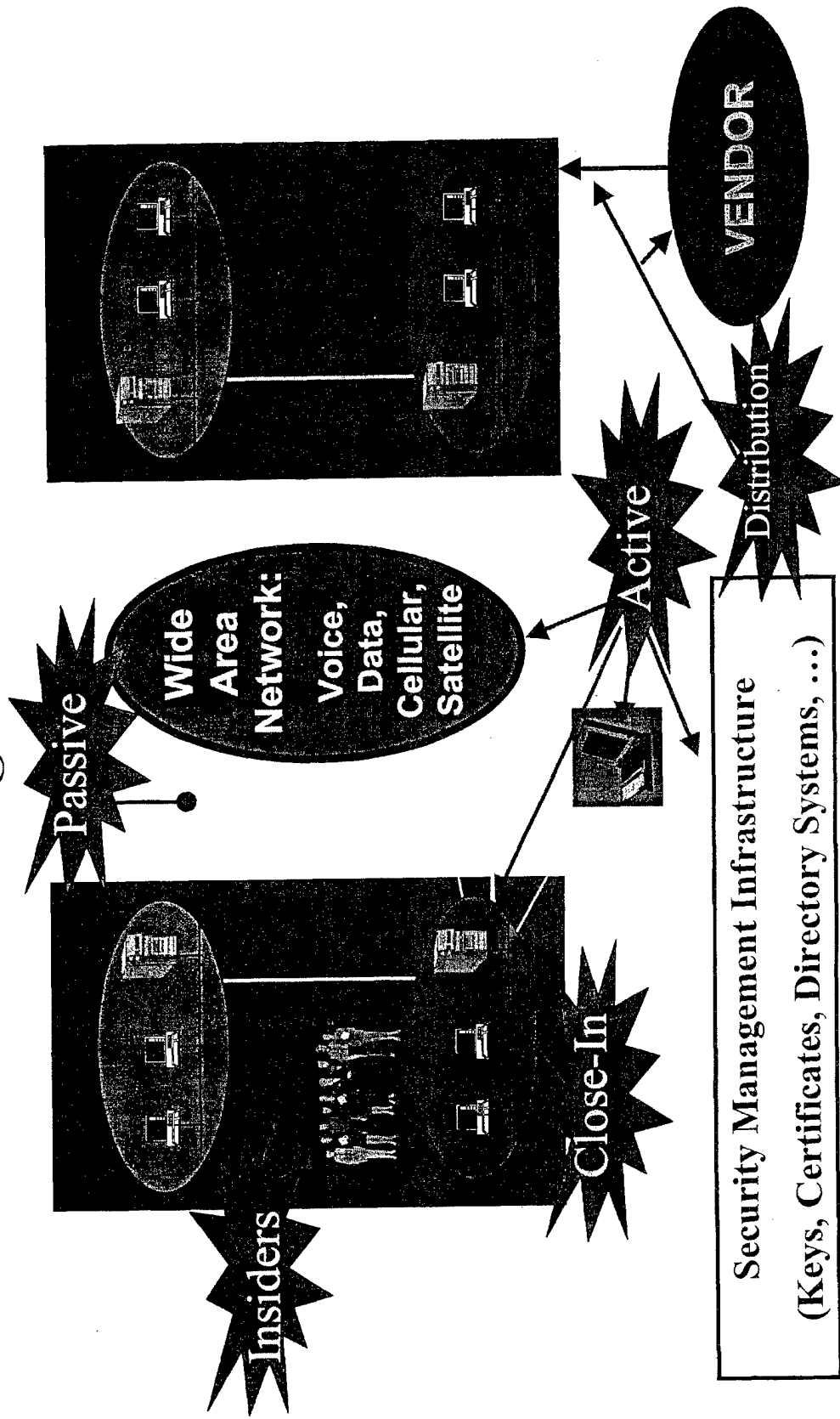
Bottom Line Up Front (BLUF)

If you don't have an expert in Information Technology (IT) Infrastructure that's working Public Key Infrastructure, then you need to get one.

Context

- What is the threat in the digital environment and where is it located?
- How are we currently ensuring that only authorized individuals have access to the electronic information?
- How will this change in the future?

Classes of Attacks against Networked Systems



Paperless Access Control Business Rules

Current Environment (1999)

Process	Access Control
Solicitations & Awards Unclassified Post Solicitations View Solicitations Submit Proposal Contract Awards Classified	Defined & Implemented ID & Password through Contracting System None, available in Public Domain ID & Password, secure session via Secure Sockets Layer (SSL) Telephonically to Contractor or Electronic Data Interchange (X12) transaction set through the Federal Acquisition Network (FACNET) Not defined. Classified Solicitations and Awards are handled via Paper.
E-Catalogs & E-Mail Browsing Ordering Payment Order Status Tracking	.MIL Domain Restriction ID & Password, secure session via Secure Sockets Layer (SSL) ID & Password, secure session via Secure Sockets Layer (SSL) ID & Password, secure session via Secure Sockets Layer (SSL)
Technical Drawings View Drawings Order Drawings	None for Distribution A Type Drawings Distribution B requires ordering from the Contracting Officer, ID & Password, secure session via Secure Sockets Layer (SSL)

Paperless Access Control Business Rules

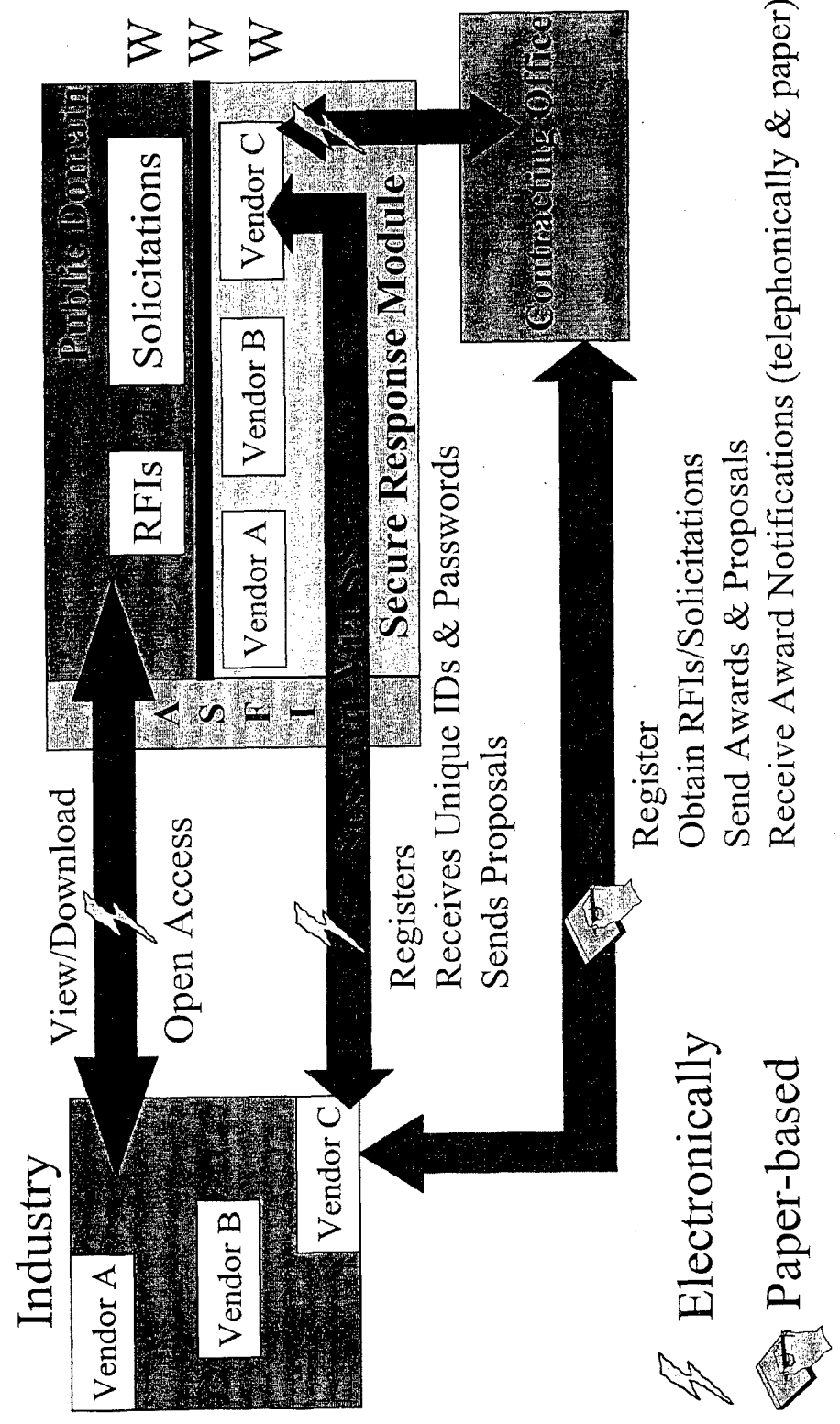
Notional Future Environment (200X)

Process	Access Control
Solicitations & Awards Unclassified Post Solicitations View Solicitations Submit Proposal Contract Awards Classified	Partially Defined ID & Password, Authentication via Identification Certificate (PKI) None, available in Public Domain ID & Password, Authentication via Identification Certificate (PKI) and secure session via Secure Sockets Layer (SSL) To Be Defined (An OSD IPT will define the paperless business rules) Not Defined (No existing plans to migrate to paperless operations)
E-Catalogs & E-Mail Browsing Ordering Payment Order Status Tracking	.MIL Domain Restriction ID & Password, Authentication via Identification Certificate (PKI) and secure session via Secure Sockets Layer (SSL) ID & Password, Authentication via Identification Certificate (PKI) and secure session via Secure Sockets Layer (SSL) ID & Password, Authentication via Identification Certificate (PKI) and secure session via Secure Sockets Layer (SSL)
Technical Drawings View Drawings Order Drawings	None for Distribution A Type Drawings Distribution B requires ordering from the Contracting Officer ID & Password, Authentication via Identification Certificate (PKI) and secure session via Secure Sockets Layer (SSL)

Business Scenarios Current Environment (1999)

Solicitations & Awards w/Security Overlay

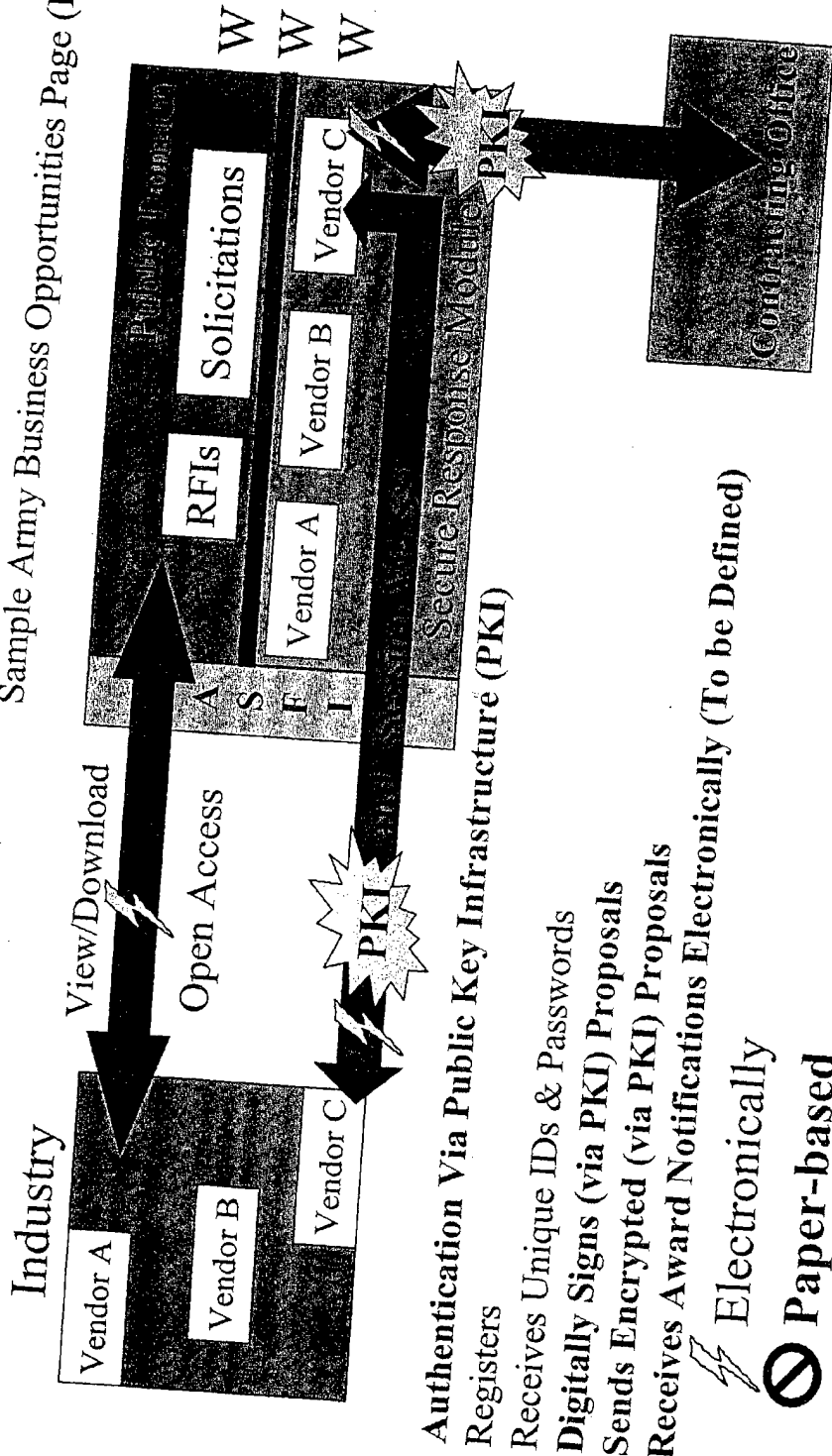
ASFI: <http://www.army-acquisition.net> Sample Army Business Opportunities Page (BOP)



Business Scenarios Future Environment (200X) Solicitations & Awards w/Notional Security Overlay

ASFI: <http://www.army-acquisition.net>

Sample Army Business Opportunities Page (BOP)

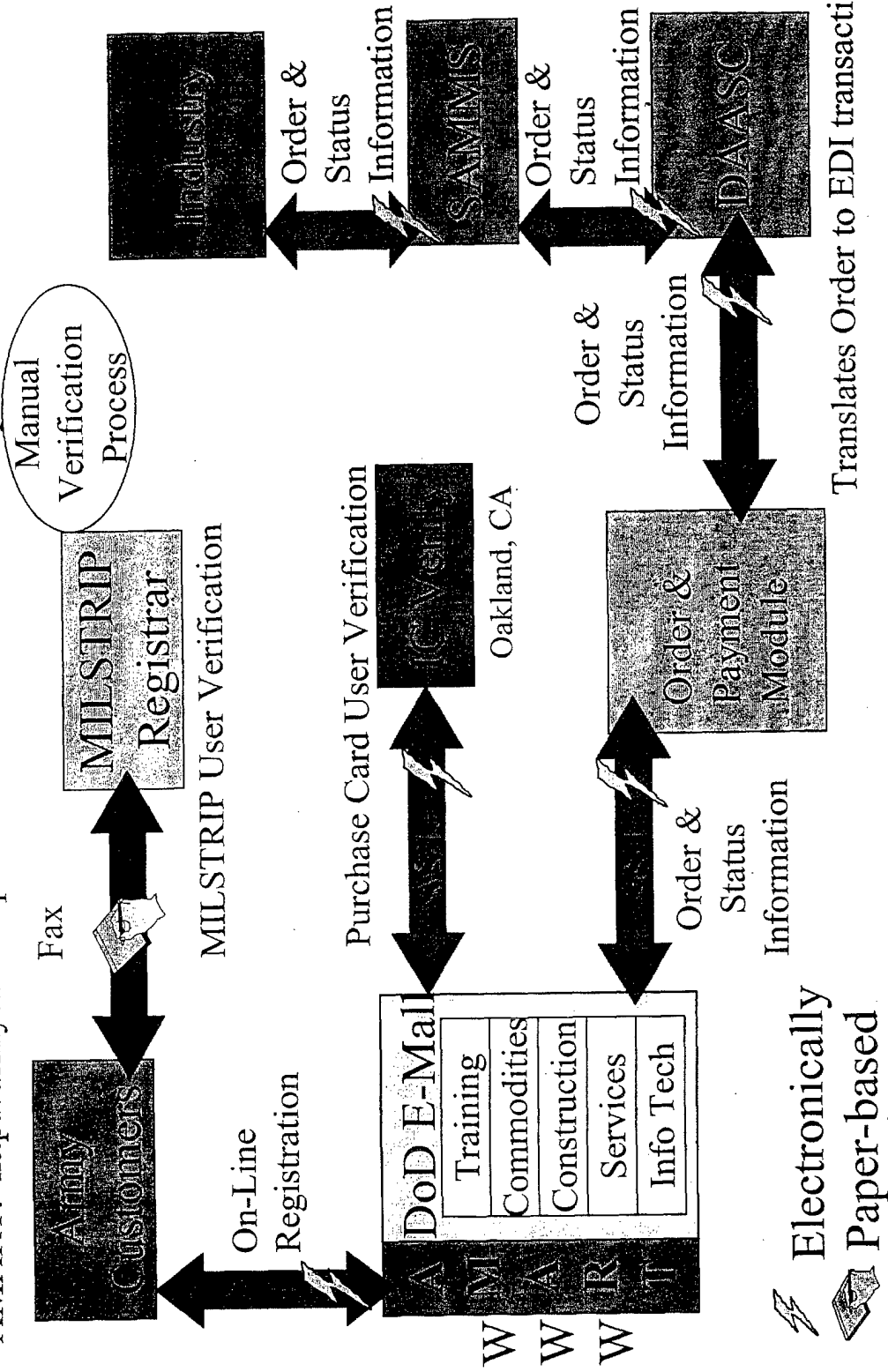


Business Scenarios - Current Environment (1999)

E-Catalogs & E-Mail w/Security Overlay

AMART: <http://armysarda.elpress.com>

E-Mail: <http://www.emall.dla.mil>

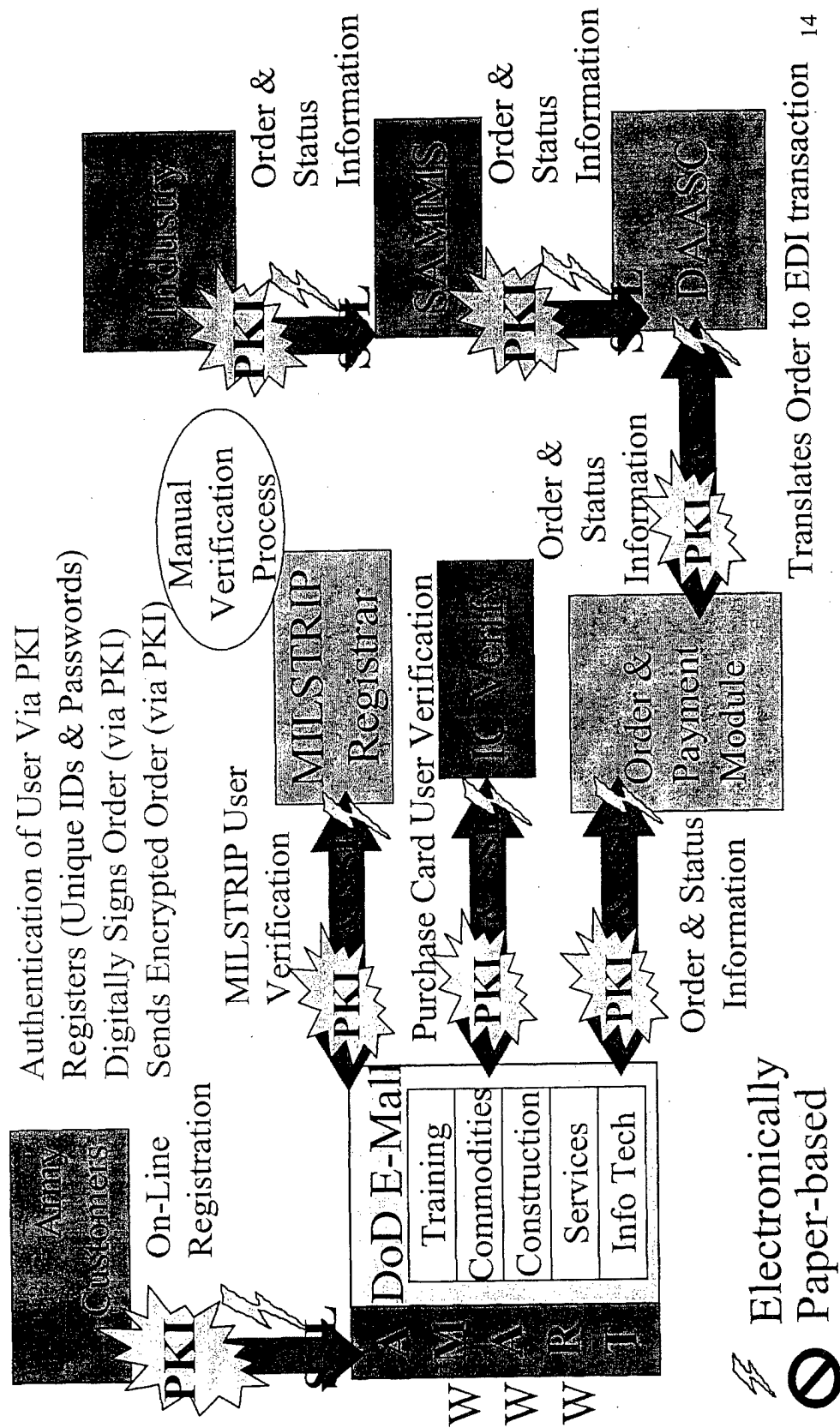


Business Scenarios - Future Environment (200X)

E-Catalogs & E-Mall w/ Notional Security Overlay

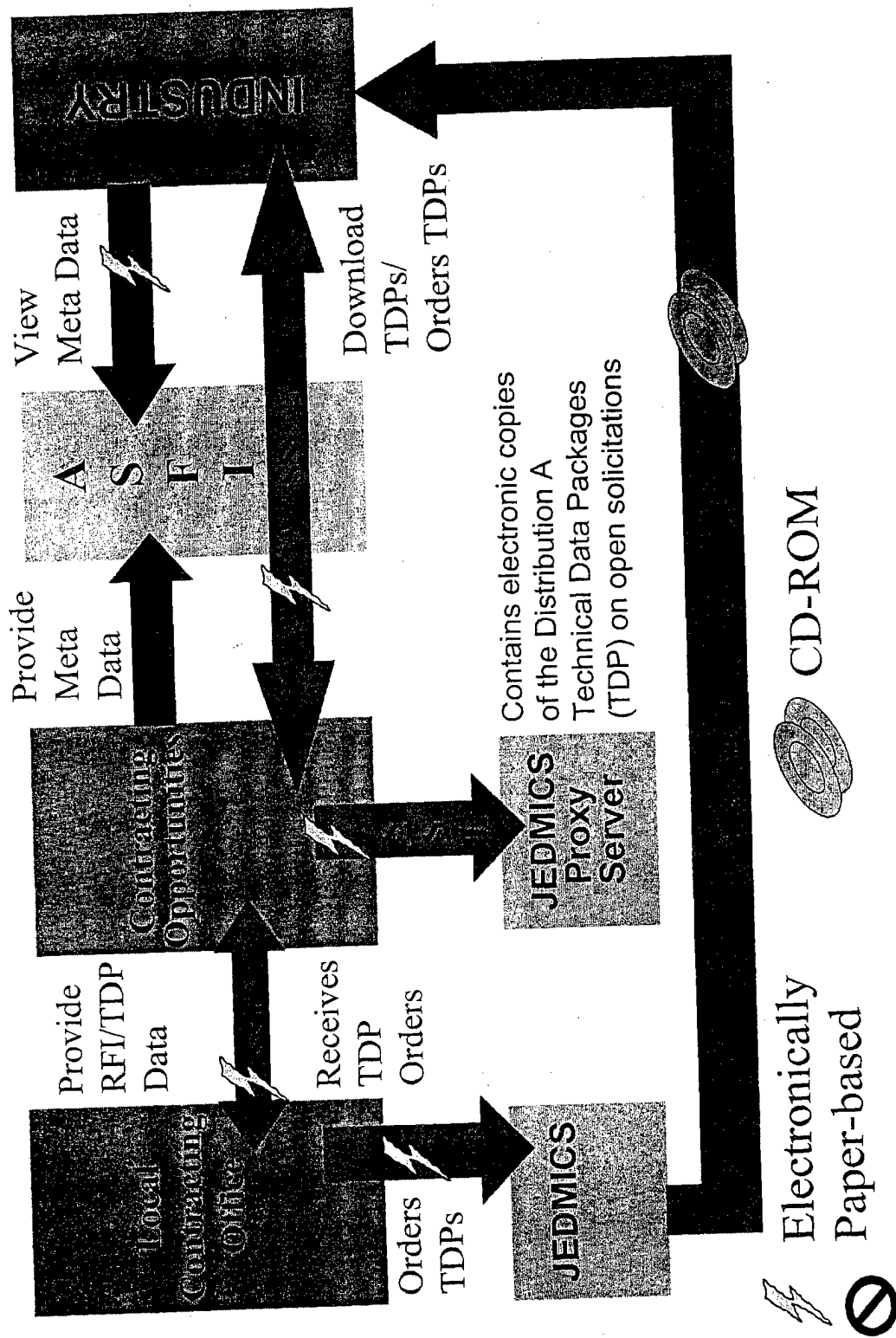
AMART: <http://armysarda.elpress.com>

E-Mail: <http://www.emall.dla.mil>



Business Scenarios Current Environment (1999)

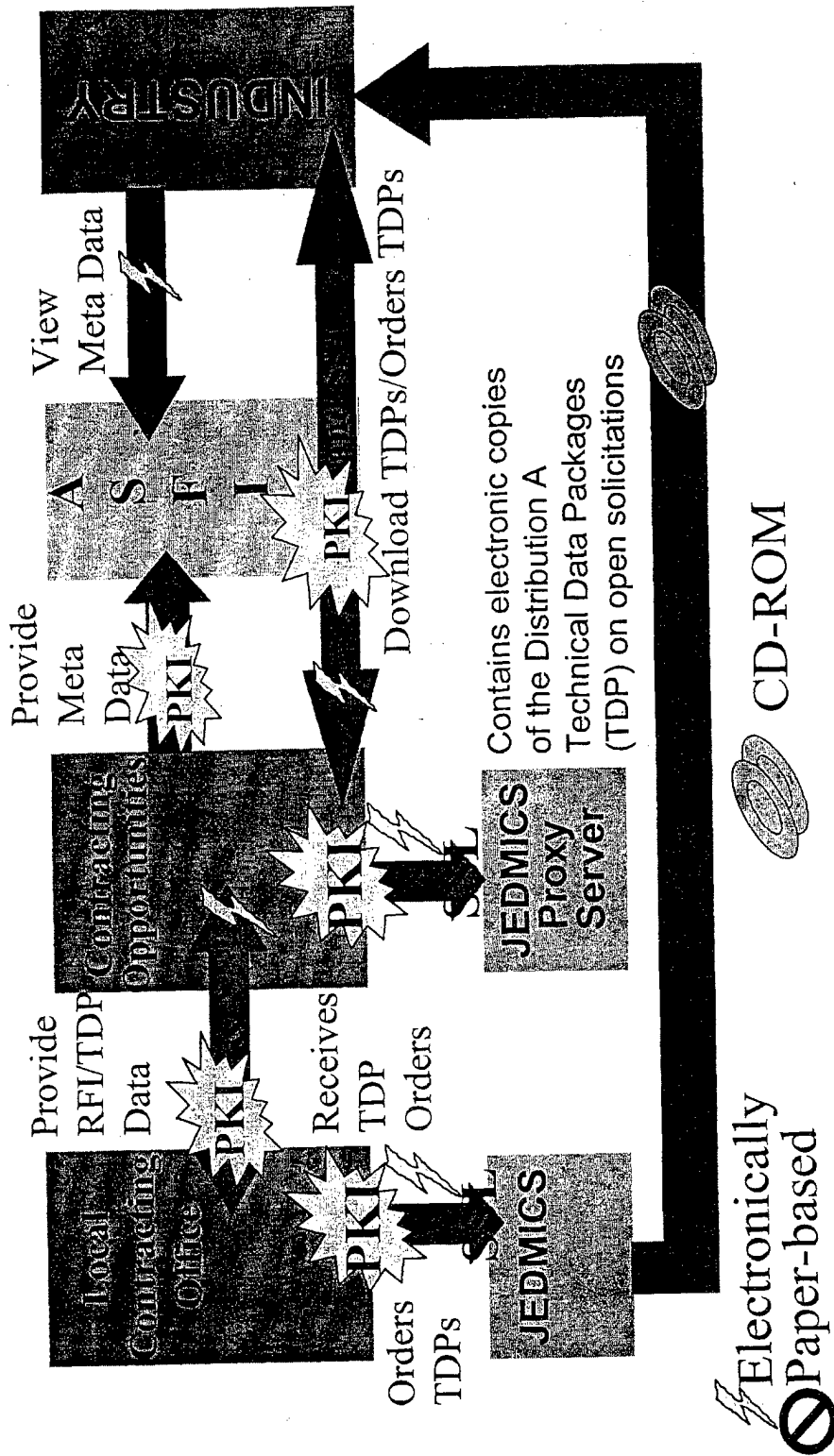
Technical Drawings w/Security Overlay



Business Scenarios Future Environment (200X)

Technical Drawings W/ Notional Security Overlay

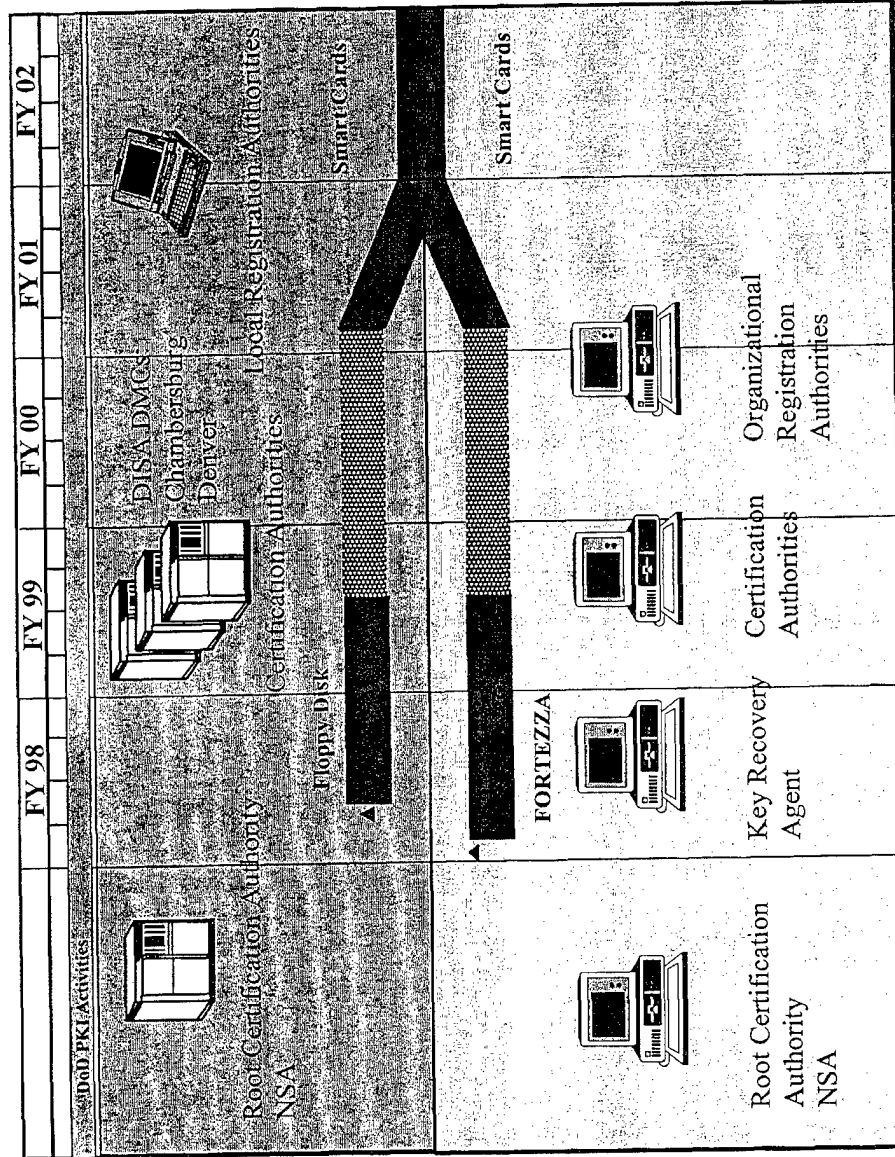
NOTE: No Defined Business Process Changes for Future Environment
Changes as a result of Pending DoD PKI Policy



PUBLIC KEY INFRASTRUCTURE

**Pilot
Medium
Assurance
Service
(SBU)**

**DMS
High
Assurance
Service
(Classified)**



GOAL

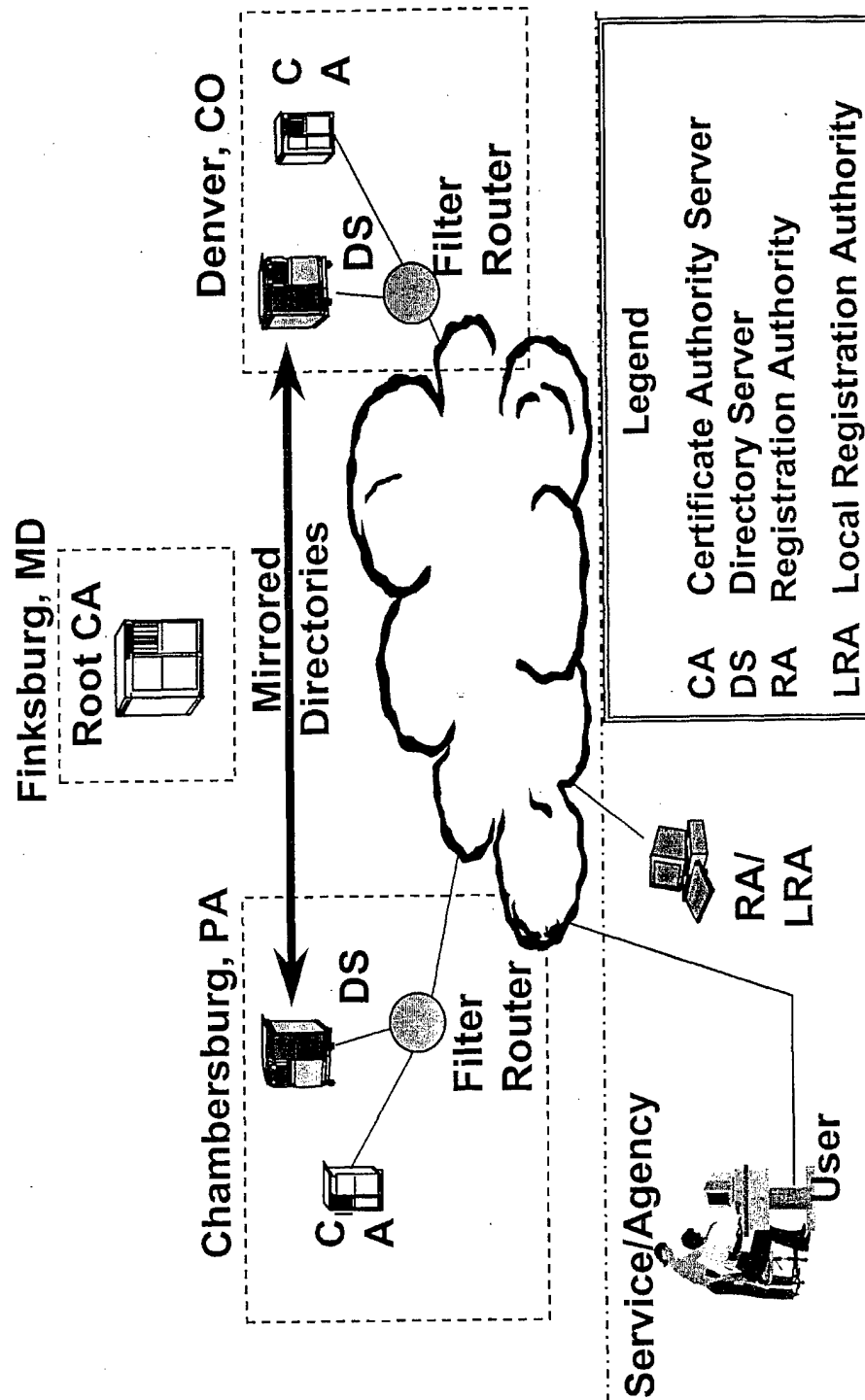
KEY

Completed

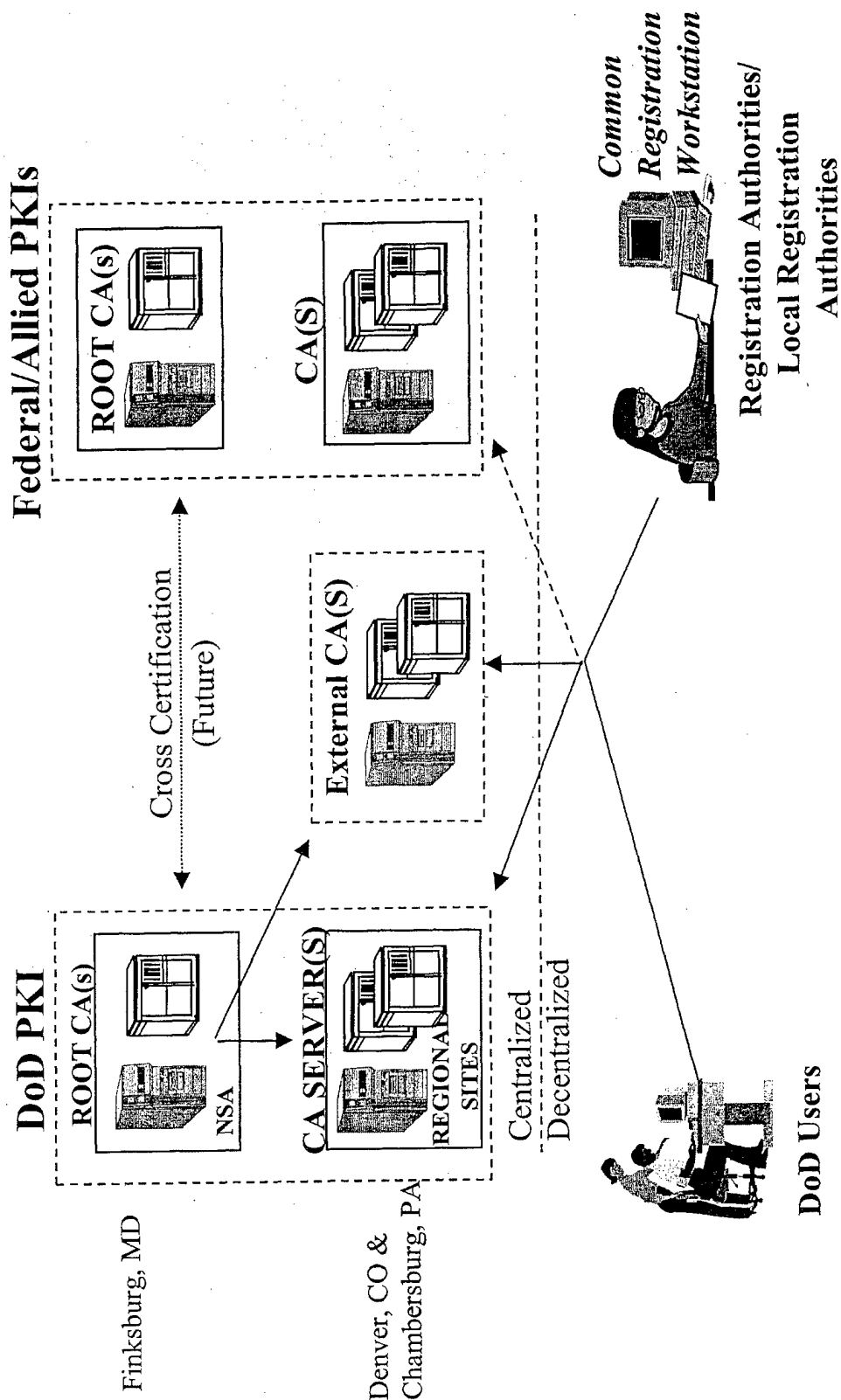
Pending

Merged

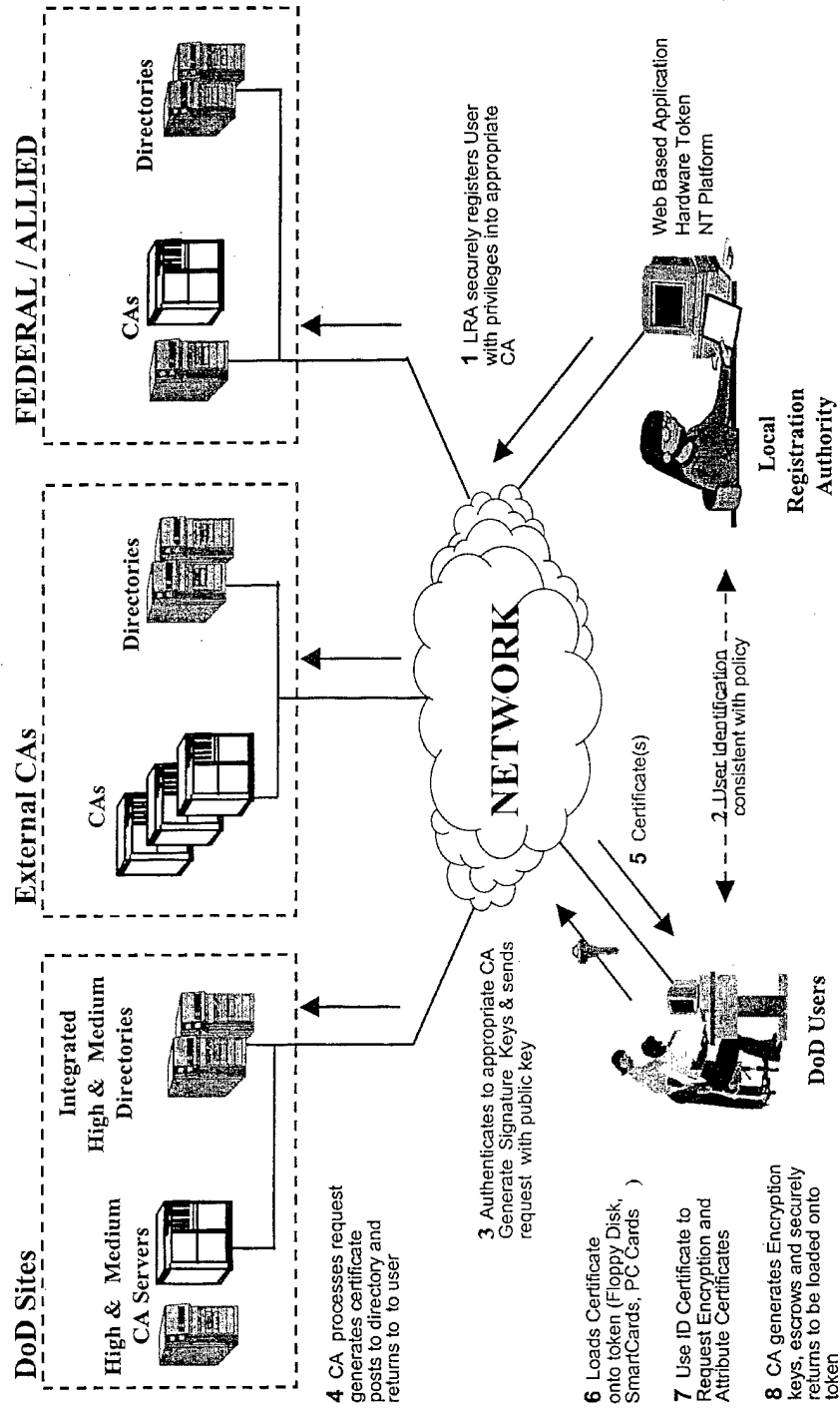
DoD Medium Assurance Public Key Infrastructure



Target DoD PKI Architecture for Interoperability



Target User Registration

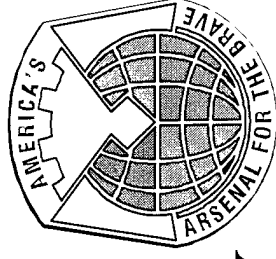


Challenges and Opportunities

- Challenges:
 - Paperless Environment for Business Processes must be Defined/Redefined to accommodate emerging technology and security policies.
 - Obtaining the required resources to implement paperless operations.
 - Achieving the cultural change to move to paperless operations
- Opportunities:
 - Achieve efficiencies by defining/redefining business processes to take advantage of information technology.
 - Securing our Information.
 - Reducing Vulnerabilities.

RECAP

- The Threat to our information assets is real and our vulnerability is increased as we move towards paperless operations.
- We must ensure that appropriate access controls and policies are in place to safeguard our information.
- The DoD is rapidly moving towards a paper-free contracting process.
- Today's information is protected in transit through the use of SSL.
- Tomorrow's information will be afforded greater protection by the implementation of a PKI.
- Government and Industry must work together as we begin to implement a DoD PKI to ensure interoperability is achieved.
- Uncle Sam Wants You!



1999 ATLANTA XXV ACQUISITION REFORM SURVEY 20 APRIL 1999

Presented by
MG Greenberg (RET), NDIA
with Mr. Tull, AMC

ACQUISITION REFORM AS SEEN BY INDUSTRY AND ARMY

◆ RESULTS OF THE 1999 NATIONAL DEFENSE INDUSTRIAL ASSOCIATION & ARMY SURVEYS * :

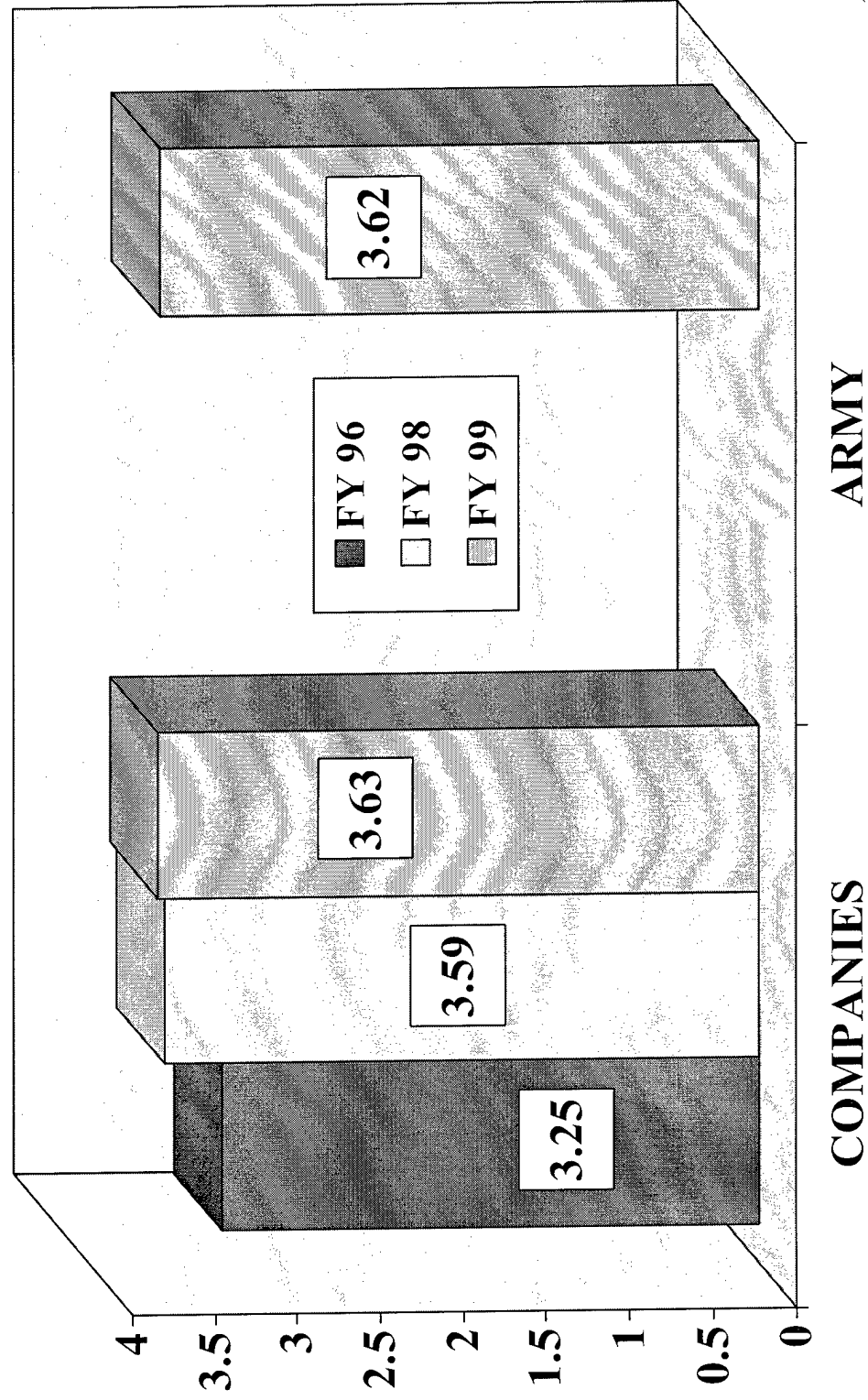
- DOES INDUSTRY UNDERSTAND ACQUISITION REFORM (AR)
- PROGRESS MADE BY COMPANIES IN IMPLEMENTING AR
- PROGRESS MADE BY ARMY IN IMPLEMENTING AR
- HOW WELL IS AR BEING IMPLEMENTED ON DIFFERENT CONTRACT TYPES
- WHAT CONCRETE RESULTS COMPANIES ARE ACHIEVING
- HOW PROGRESS VARIES AMONG FEDERAL AGENCIES
- ◆ USED RATING SCALE OF 1-5 (5 BEING THE HIGHEST)

◆ SURVEYS OF ARMY & INDUSTRY COMPARE “APPLES TO APPLES”

* 59 Industry Responses / 112 Army Responses

2 of 12

HOW WELL DO COMPANIES UNDERSTAND ACQUISITION REFORM?



ASPECTS OF AR BEST UNDERSTOOD BY COMPANIES

	<u>FY96</u>	<u>FY98</u>	<u>FY99</u>
• Mil Specs Replaced w/ Commercial/Performance Specs	3.80	4.14	4.15**
• Source Selection Based on Best Value	3.70	3.97	4.13**
• Use of IPPD and IPTs			4.12*
• Mil Specs Replaced w/ Commercial Performance Specs			4.05*

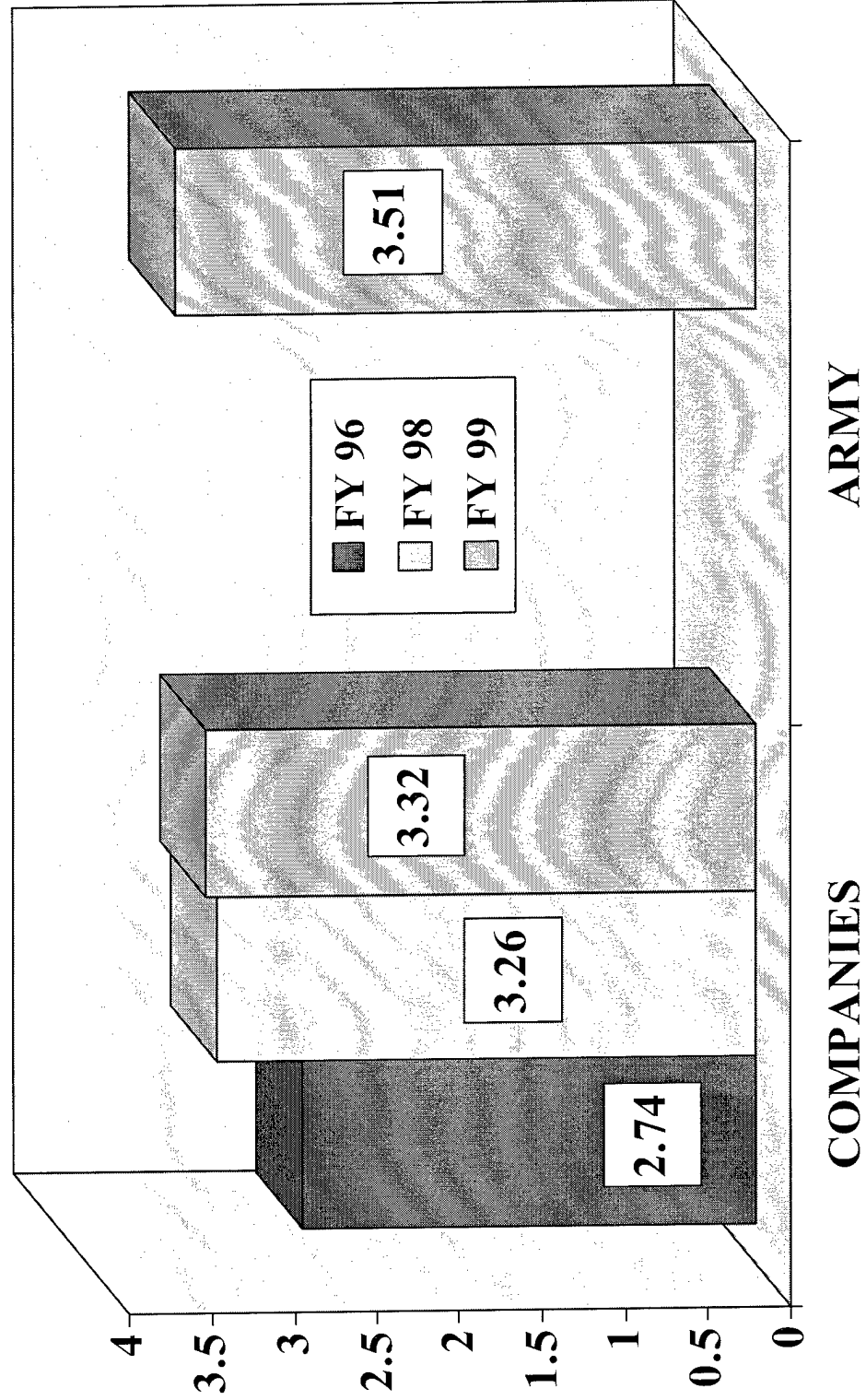
ASPECTS OF AR LEAST UNDERSTOOD BY COMPANIES

	<u>FY96</u>	<u>FY98</u>	<u>FY99</u>
• DoD Mgmt Transition from “Oversight” to “Insight”	2.70	2.81	2.68**
• Government Commercial Buying Practices	Unk	3.11	3.12**
• DoD Mgmt Transition from “Oversight” to “Insight”			2.95*
• DoD “Block Change” & “Common Process Facility” Initiative			3.31*

** Industry Response

* Army Response
4 of 12

**WHAT PROGRESS HAS BEEN MADE BY INDUSTRY
IN IMPLEMENTING ACQUISITION REFORM?**



WHERE ARE COMPANIES MAKING THE MOST PROGRESS IMPLEMENTING AR?

	<u>FY96</u>	<u>FY98</u>	<u>FY99</u>
• Use of IPPD and IPTs	Unk	3.72	3.97**
• Tracking and Improvement of Past Performance	Unk	3.82	3.88**
• Use of IPPD and IPTs			3.94*
• Elimination of Military Specifications			3.85*

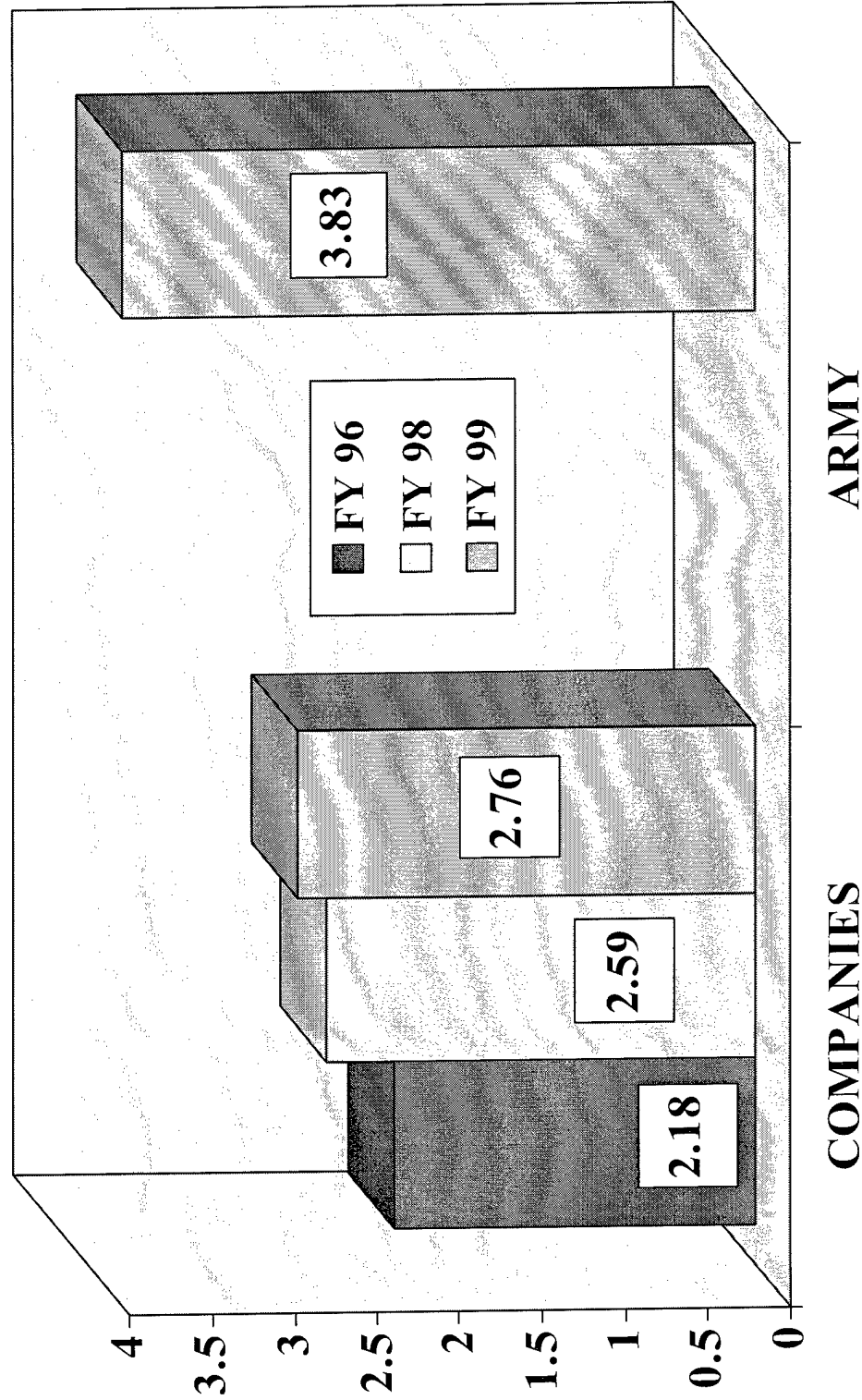
WHERE ARE COMPANIES MAKING LEAST PROGRESS IMPLEMENTING AR?

	<u>FY96</u>	<u>FY98</u>	<u>FY99</u>
• Use of Alternative Dispute Resolution and Partnering	2.30	2.89	2.83**
• Fixed Priced Commercial Products and Services	Unk	2.77	2.94**
• Fixed Priced Commercial Products and Services			3.10*
• Implementation of Electronic Commerce			3.28*

** Industry Response

* Army Response
6 of 12

WHAT PROGRESS HAS ARMY MADE IN IMPLEMENTING ACQUISITION REFORM?



WHERE IS THE ARMY MAKING THE MOST PROGRESS IMPLEMENTING AR?

	<u>FY96</u>	<u>FY98</u>	<u>FY99</u>
• Management through IPPD and IPTs	Unk	3.09	3.36**
• Source Selection Based on Best Value	2.70	3.08	3.10**
• Management through IPPD and IPTs			4.26*
• Use of Performance Specs at End-System/End-Product Level			4.05*

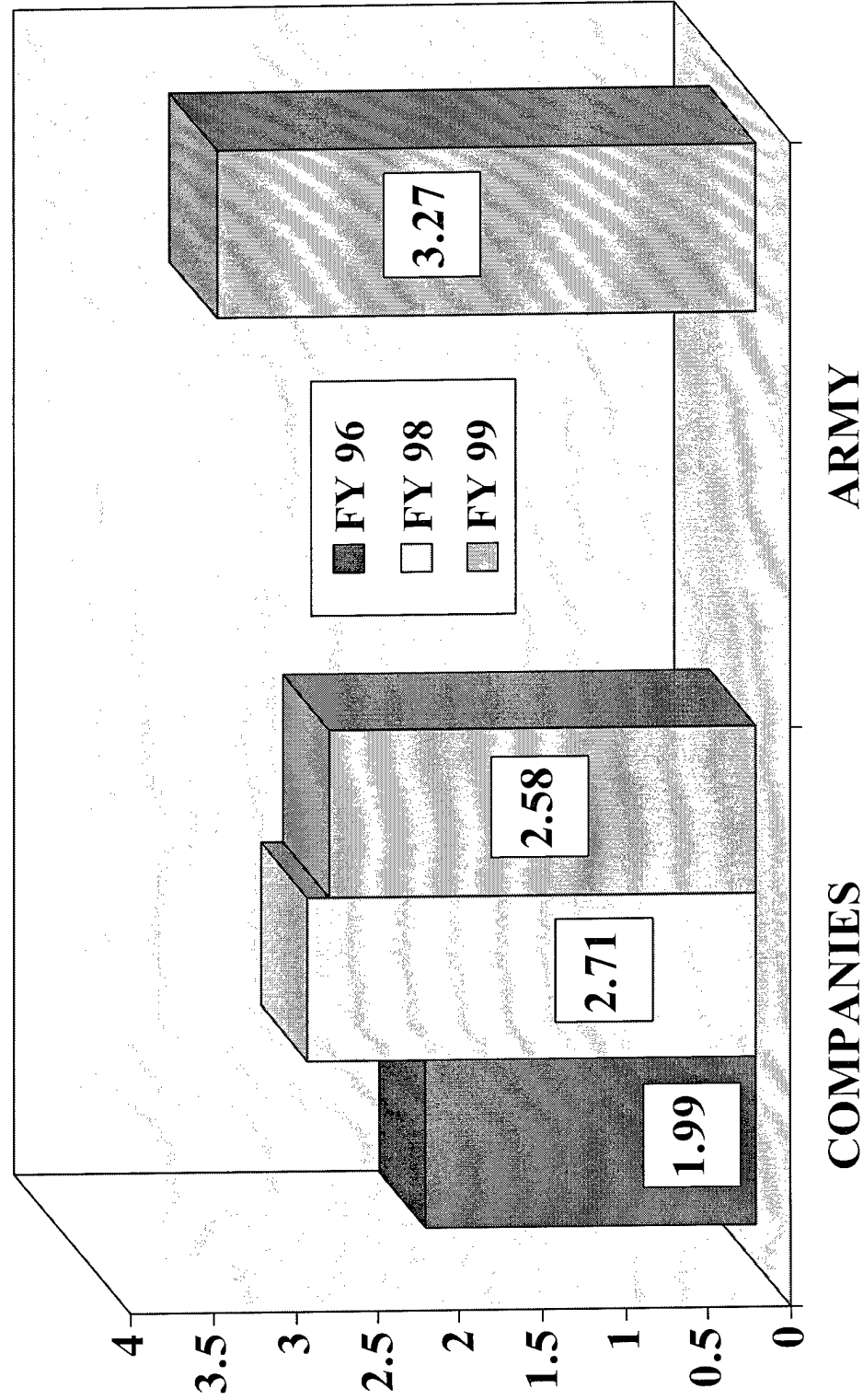
WHERE IS THE ARMY MAKING LEAST PROGRESS IMPLEMENTING AR?

	<u>FY96</u>	<u>FY98</u>	<u>FY99</u>
• Commercial Products and Services as Defined in FASA	1.90	2.16	2.24**
• Replacement of Arms Length/Litigation Relationship with Alternative Dispute Resolution and Partnering	Unk	2.38	2.33**
• DoD "Block Change" & "Common Process Facility" Initiative			3.33*
• Commercial Products and Services as Defined in FASA			3.51*

** Industry Response

* Army Response
8 of 12

**HAVE YOU SEEN CONCRETE RESULTS
IN THE OPERATIONS OF COMPANIES
AS A RESULT OF ACQUISITION REFORM?**



WHERE HAS AR MOST IMPROVED THE PROCESS FOR INDUSTRY?

	<u>FY96</u>	<u>FY98</u>	<u>FY99</u>
• The Draft RFP Process	2.70	3.30	3.35**
• Communication with DoD Customers	Unk	3.02	2.97**
• The Draft RFP Process			3.90*
• Communication with DoD Customers			3.57*

WHERE HAS AR LEAST IMPROVED THE PROCESS FOR INDUSTRY?

	<u>FY96</u>	<u>FY98</u>	<u>FY99</u>
• Proposal Preparation is Less Expensive	1.70	2.31	2.06**
• Non-Value Added Oversight Audits and Inspections Have Decreased	1.50	2.38	2.26**
• Significant Cost Savings Achieved on Existing Contracts			2.71*
• Proposal Preparation is Less Expensive			2.89*

** Industry Response

* Army Response
10 of 12

HOW WELL IS AR BEING IMPLEMENTED ON DIFFERENT TYPES OF PROCUREMENTS?

	<u>FY96</u>	<u>FY98</u>	<u>FY99*</u>
MAJOR PROGRAMS	2.40	3.45	3.19 / 4.11
ENGINEERING & TECHNICAL SERVICES	1.70	2.55	2.83 / 3.72
ANALYTICAL & ASSESSMENT SERVICES	2.10	2.23	2.61 / 3.63
NON-MAJOR PROGRAMS	2.00	2.86	2.59 / 3.79
OPERATION & MAINTENANCE	1.70	2.29	2.53 / 3.54
SPARES/REBUYS	1.70	2.18	2.48 / 3.18

* Industry Response / Army Response
11 of 12

HOW WELL IS EACH AGENCY MANAGING ACQUISITION REFORM?

	<u>FY96</u>	<u>FY98</u>	<u>FY99*</u>
AIR FORCE	3.20	3.30	3.23 / 4.10
ARMY	2.70	3.17	2.95 / 4.10
NAVY	2.10	2.66	2.71 / 3.79
DLA	2.10	2.50	3.08 / 4.33

* Industry Response / Army Response_{12 of 12}



PARTNERING WITH SMALLER BUSINESSES IN A COMPETITIVE ENVIRONMENT

*“Small and Mid-size Companies
Competing With and Against Mega-
Sized Businesses”*

COMPETING IN A CHANGING ENVIRONMENT

- ◆ Due to resource constraints DOD is increasing the size of the service contracts (Omnibus contracts)
- ◆ “Mega-sized” hardware companies find large services contracts more attractive as traditional OEM business declines



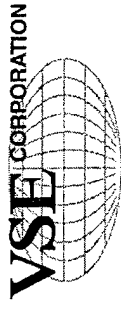
THE SQUEEZE

- ◆ **Economics favor large business**
- ◆ **Government policy helps small business**
- ◆ **Mid-size firms caught in middle**



THE CONSEQUENCE

- ◆ Overall cost increases to the Government
- ◆ Mergers/Acquisitions reduce “competition base”



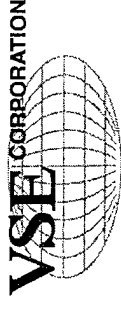
FACTORS DRIVING BUSINESS STRATEGIES

- ◆ Use of large omnibus service contracts
- ◆ Fuel acquisition/merger fire (reduces “competition base”)
- ◆ Bundling (hurts small/mid-sized companies)
- ◆ Limits competition -- increases B&P costs
- ◆ Mega-sized companies can low ball and freeze out small/mid-sized companies
- ◆ Length of contracts
- ◆ Ten years too long --no viable bidders remain
- ◆ Allows opportunity to bid contract at loss for 5 years - make up in last 5 years



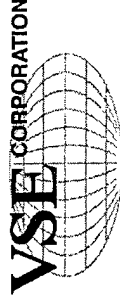
FACTORS DRIVING BUSINESS STRATEGIES

- ◆ Large scale multiple award task & delivery order contracts
- ◆ Attractive to mega-sized companies
 - ◆ Strong arm tactics
 - ◆ JV's with mega-companies nearly impossible for small mid-sized companies
- ◆ Compete at 2 levels - drives up B&P cost
- ◆ Drives to lowest price - not best value
- ◆ Small business/mid-sized companies not perceived as creditable bidders (management capability/ financial strength)



FACTORS DRIVING BUSINESS STRATEGIES

- ◆ Past Performance (Impacts Small, Mid-Size and Mega Companies)
 - ◆ Improves performance of marginal as well as good companies
 - ◆ Improper use, either inadvertently or by design, could destroy viable business
 - ◆ Performance evaluation plan should be specified in RFP/Contract
 - ◆ Direct requests to other Agencies by Contracting Officers is an uncontrolled process



FACTORS DRIVING BUSINESS STRATEGIES

PAST PERFORMANCE (continued)

- ◆ Past Performance Evaluation/Award fee separate process (only need one)
- ◆ Need better system to review and challenge before misunderstandings get reduced to writing
- ◆ Mega-sized companies - have advantage -- poor performance -- bid from another division/business unit
- ◆ Teaming Partners certify no history of bad performance



CONCLUSIONS

- ◆ Service contracting has been around a long time
- ◆ Process is not broken (suggested areas of improvement)
 - ◆ GAAP vs. CAS (reduce contractor costs)
 - ◆ SBA Reevaluate Small Business Size Standards
 - ◆ Expand Partnering Concept
 - ◆ Consider Preservation of “Competition Base” as “Best Value” Eval Factor
- ◆ Move to Performance Based Contracts
 - ◆ Develop Metrics for Eval
 - ◆ Consistent with Past Performance Evals



CONCLUSIONS (continued)

- ◆ A-76 is failed process
 - ◆ Needs major rework
- ◆ Procurement Reform made it more difficult and costly for service contractors
- ◆ DOD current procurement strategies threaten “competition base” by fueling mergers/ acquisitions
- ◆ DOD Review Procurement Strategies and how/where they are driving Service Industry

ATLANTA XXV

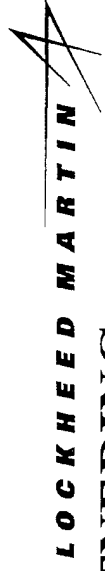
Panel 2

Partnering with Smaller Businesses
In Competitive Environments
Large Company Viewpoints
April 20, 1999

Peter DeMayo
Vice President Contract Policy
Lockheed Martin Corporation

AQUISITION REFORM

- Top DOD priority. Lots of success stories.
- DOD initiatives on commercial products and commercial practices need more attention
- Fertile ground for broadening industrial base and encouraging smaller businesses to participate in DOD requirements
- Larger businesses need to take the lead
 - Association activity
 - Direct company involvement
 - Flow the benefits of acquisition reform to supplier base
- Teaming is the key



SMALL BUSINESS - PARTNERING LARGE COMPANY VIEWPOINTS

GENERAL INDUSTRY INVOLVEMENT

Trade Associations Play a Key Role

- AIA Establishes Supplier Management Council
- Better Representation for Supplier Issues
- Better Communication of Aerospace Industry

Requirements

- Supplier Measurement
- Acquisition Reform
- Electronic Commerce

Role For Other Association Support



SMALL BUSINESS - PARTNERING LARGE COMPANY VIEWPOINTS

- DOD downsizing requires that large businesses provide greater support toward meeting small businesses goals and objectives
- Traditional Government programs can be supported by large companies
 - Small Business
 - Small Disadvantage Business
 - Women Owned Business
 - HBCU/MI
- Small Business can contribute to best value. There are many high quality small business firms in the industrial base.



SMALL BUSINESS - PARTNERING LARGE COMPANY VIEWPOINTS

- Working with Historically Black Colleges and Universities and Minority Institutions (HBCU/MIs)
- Contract Awards for
 - Research and Development
 - Feasibility Studies
- Lockheed Martin Success Stories
 - Florida A&M University - Involved in Chip Wafer Fabrication and development of Ultra Capacitors - LME&M
 - Norfolk State - Light Weight Composite Material Testing for Tecnico

SMALL BUSINESS - PARTNERING LARGE COMPANY VIEWPOINTS

- Establishing Mentor / Protégé Programs
 - Assist Small Businesses in Business Development, Marketing, Quality Assurance, Human Resources, Engineering, Training etc.
- Lockheed Martin and Mentor Protégé Success Stories
 - LM Electronics and Missiles and TLC Precision-Chip wafer technology
 - LM Vought and Tecnico Light Weight Composite material - PAC-3 Missile
 - LM Electronics and Missiles and TJ Technologies - Ultra Capacitors - JASSM
 - LM Aeronautics and Enginetics - C130 Galley

SMALL BUSINESS - PARTNERING LARGE COMPANY VIEWPOINTS

- Issues to be Worked
 - Teaming Difficult - Limited Capital investment Available
 - Ensure Small Business receives contract after being part of competitive award
 - Keep Small Business involved when contract bundling. Requires innovation.
 - Keep open option for Small Business to be Prime with support by large business

SMALL BUSINESS - PARTNERING LARGE COMPANY VIEWPOINTS CONCLUSION

- Industry looks for continued success with Small Business.
All part of change.
 - Outreach through Home Pages
 - Meeting and Conferences
- Redefined relationships do not alter the imperative
 - Small Business participation makes sense - business sense.
 - Government and large business needs to agree on rules and expectations

J.M.W. LLER

ASSOCIATES
MANAGING THE VISION

ENVIRONMENT
MANAGEMENT
ENGINEERING
PLANNING
ENERGY

Burke, VA • Atlanta, GA
San Antonio, TX • Oak Ridge, TN

TEAMING WITH A LARGE BUSINESS

A SMALL BUSINESS PERSPECTIVE

J.M.W. WALLER
ASSOCIATES
MANAGING THE VISION

2

PROFILE OF J.M. WALLER ASSOCIATES, INC.

- An Engineering Services Company
- Incorporated in 1993
- Minority-Owned Business
- SBA 8(a) Certified
- Participates in the Mentor/Protege Program

J.M. WALLER
ASSOCIATES
MANAGING THE VISION

MANAGEMENT & TECHNICAL SERVICES

- Environmental Engineering & Management
- Facilities Management
- Hazardous Material & Waste Management & Training
- Public Information & Outreach
- Information Technology & Management

J.M.WALLER
ASSOCIATES
MANAGING THE VISION

MAJOR CLIENTS

- Department of the Army
- Department of the Air Force
- U.S. Army Forces Command
- U.S. Army Training and Doctrine Command
- U.S. Army Reserve Command
- Army Corps of Engineers
- Army Environmental Center
- Air Force Center for Environmental Excellence
- Military Installations - CONUS, Hawaii, Germany & SW Asia

J.M. WALLER
ASSOCIATES
MANAGING THE VISION

WHY WOULD A SMALL BUSINESS CONSIDER TEAMING WITH A LARGE BUSINESS?

- Client Bundling or Broad Scope Contracts
- Lack of Sufficient Set-Asides
- Add Depth and Breadth to its Capability
- Provide Specialty or Niche Services
- Introduction to New Clients
- Improve Potential for Contract Award
- Enhance Proposal Writing Capabilities

J.M.W. WALLER
ASSOCIATES
MANAGING THE VISION

6

J.M. WALLER ASSOCIATES
EXPERIENCE WITH TEAMING ARRANGEMENTS
(AS THE PRIME)

OBSERVATIONS

- Teaming Partners Have Been Responsive
- Partners Provided Depth to the Team
- Quality of Proposals has Improved Significantly
- Success Has Been Slow in Coming

J.M. WALLER
ASSOCIATES
MANAGING THE VISION

J.M. WALLER ASSOCIATES
EXPERIENCE WITH TEAMING ARRANGEMENTS
(AS THE SUB)

OBSERVATIONS

- Prime Must Commit a Specific Portion of the Contract to Small/Minority Business
- Large Business Must Strive to Meet Small/Minority Contractual Goals
- A Good Reputation as a Competent Sub is Imperative
- A Significant Challenge for the Small Company

J.M. WALLER
ASSOCIATES
MANAGING THE VISION

WHY WOULD A SMALL BUSINESS CONSIDER PARTICIPATING IN THE MENTOR/PROTEGE PROGRAM?

- Expand Business
- Increase Client Exposure
- Broaden Technical Capabilities
- Achieve Technology Transfer
- Create Infrastructure Enhancements
- Become a Preferred Provider to the Mentor

SUMMARY

- All Small and Minority Businesses Are Not Alike
- Large Businesses Should Identify Good Small/Minority Businesses Now
- Small/Minority Business Participation on Federal Contracts Is Likely to Increase
- Federal Contract Oversight Is Likely to Improve
- Presence of a Good Small/Minority Business Will Be Necessary and Helpful
- Mentor/Protege Program Relationship Offers Excellent Opportunities

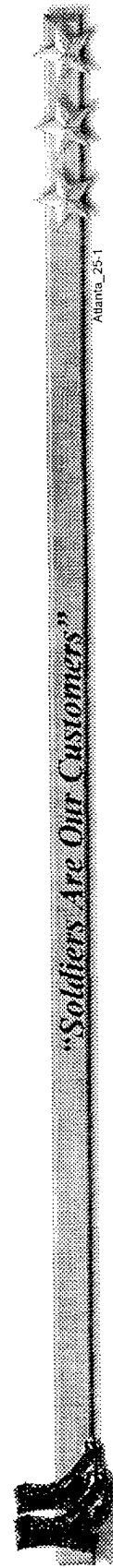
J.M. WALLER
ASSOCIATES
MANAGING THE VISION

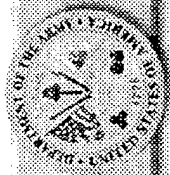
Atlanta XXV Executive Seminar:

Panel 3 - Public/Private Enterprise

LTG Paul J. Kern
Director, Army Acquisition Corps

21 April 1999





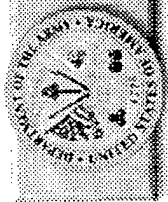
Atlanta XXV Panel Members

LTG Paul J. Kern	<i>Director Army Acquisition Corps</i>
BG George A. Landis	<i>US Army (Ret.), Vice President and Deputy, Product Support Division Raytheon Systems Company</i>
Mr. Fred Strader	<i>Vice President and General Manager, United Defense Armament Systems Division</i>
COL Gregory F. Potts	<i>Commander, Anniston Army Depot</i>
Mr. Jerry DeMuro	<i>Vice President and General Manager, Communication Systems Division, GTE Government Systems Corp.</i>
Mr. Dan Gans	<i>Military Legislative Assistant to Representative Riley, Alabama</i>



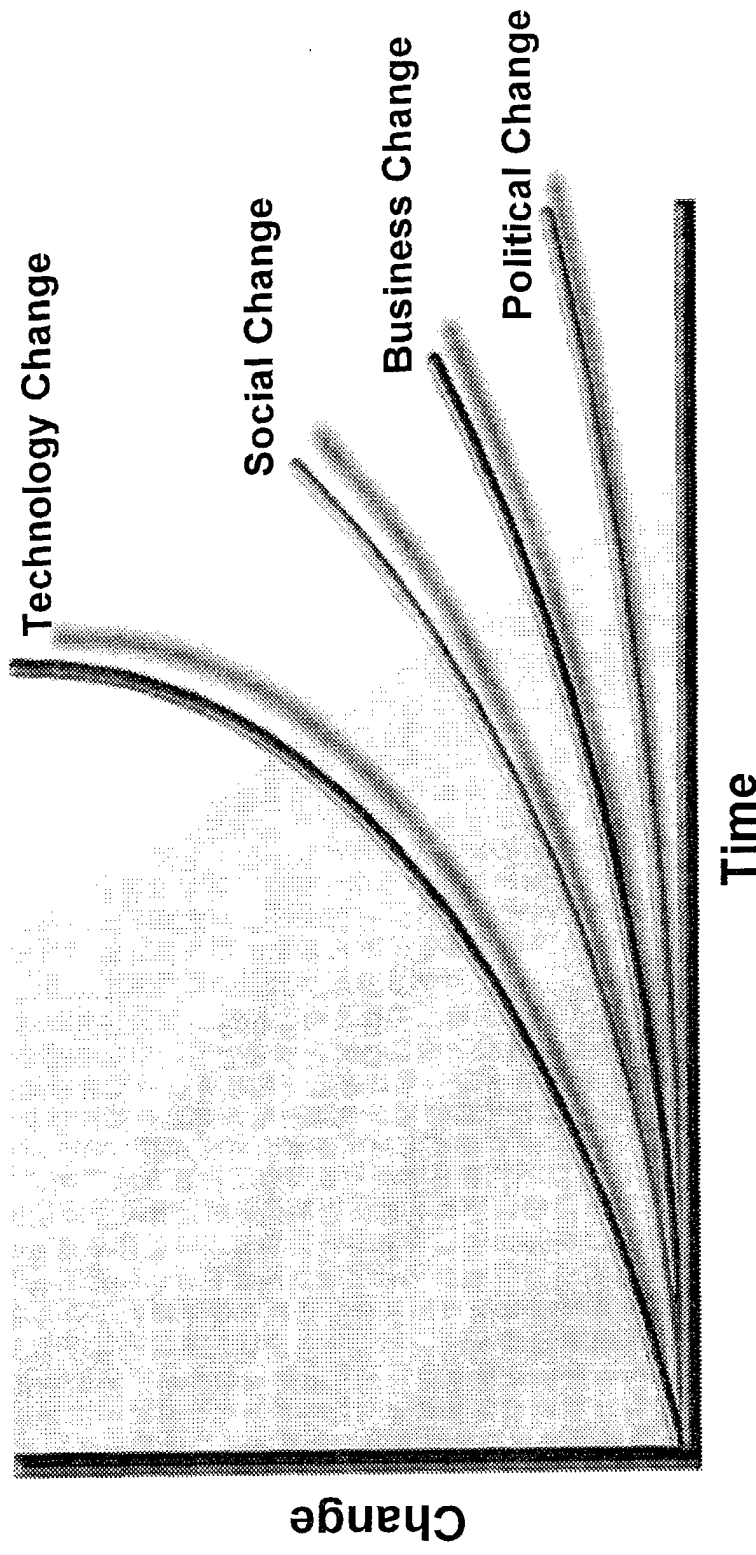
"Soldiers Are Our Customers"

Atlanta_25-2



The Law of Disruption

Law of Disruption = Combination of Moore's and Metcalfe's Laws



*Social, Political and Economic Systems Change Incrementally, but
Technology Changes Exponentially!*

From the book "Unleashing the Killer App" by Larry Downes/Chunka Mui

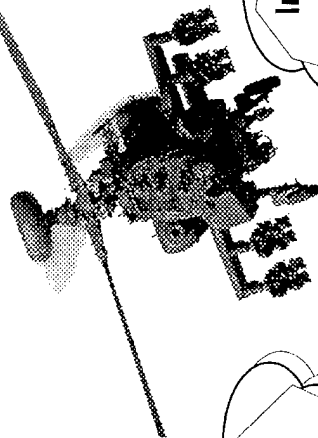
"Soldiers Are Our Customers"

Atlanta 25-3



Apache Prime Vendor Support

- Prime Vendor Support
- Unsolicited Proposal - April 97
- Contract Negotiation Completed - May 98
- Revamps Current Logistic System - Takes Advantage of Best Commercial Practices & Performance Guarantees
- Apache Prime Vendor Support Provides:
 - Depot Level Maintenance
 - Wholesale Logistics Support
 - Increased Technical Support



Modernization Thru Replacement Parts

Use of Best Commercial Business Practices

Technology Insertion Funded Thru Operational & Support Costs

Significant O&S Cost Savings

Improved System Readiness Thru Increased Availability of Spare Parts

Status: Still Working Regulatory (A-76) Issues (Financial, and Political Issues)



"Soldiers Are Our Customers"

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What is Apache Prime Vendor Support

- Apache Prime Vendor Support (PVS) is a Type of **Contractor Logistics Support (CLS)** That Assigns (“Nose to Tail”) **Wholesale Logistics Support** of the Helicopter to Private Contractor(s), i.e., Boeing and Lockheed Martin
- It is Intended to **Revamp the Current Apache Logistics System** by Taking Advantage of Best Commercial Practices, Performance Guarantees, and Incentivizing the Contractor to Sell us Reliable Parts Rather Than Spares
- We Expect PVS to **Improve System Readiness** Through the Increased Availability of Spare Parts and **Yield Significant O&S Savings** That can be Used to Modernize the Aircraft



“Soldiers Are Our Customers”

Alana 25-5



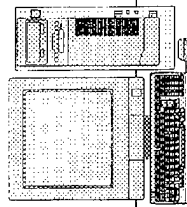
Wholesale Logistics Modernization Program

Tier II of GCSS-Army

CSA Direction

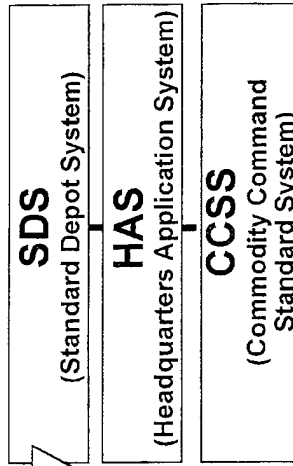


Implement Global Combat Support System - Army



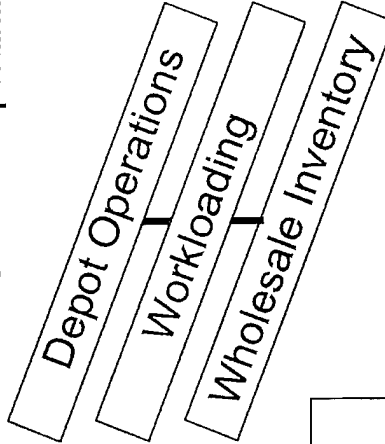
- Outdated
- Unresponsive (Batch, Not On-Line System)
- 25 Year Old Technology
- Process is 30 Years Old

Current Major Army Info Systems



Three Tiers :

- Retail Log Integration
- Wholesale-Retail Integration
- Joint Interoperability



GOAL: Modernize Wholesale Logistics Operations/ Systems

Modernization Approach

- Leverage Private Sector
- Adopt Best Commercial Practice
- Use Modern Commercial Info Technology
- Use Continuous Technology Insertion/ Commercial IT Services

CRITICAL ON-GOING ACTIONS

- A- 76 Waiver Pending Approval
- RFP - Ready for Release
- RFP + 10 months = Contract Award



"Soldiers Are Our Customers"

Atlanta_25-6

Raytheon

A 25 Year Relationship Building on the Past to Shape the Future

Public/Private Enterprise

George A. Landis
Vice President and Deputy for Logistics
Training & Services
Raytheon Systems Company

What Privatization Requires:

- Willingness to prioritize interests of the Soldier
- Objective cooperation
- Responsive contracting vehicles/mechanisms
- Real-time communications
- Best business practices
- Trust

What Privatization Does Not Need:

- Excessive Federal direction
- Unnecessary delays
- Sub-optimizing national interests
- To gain a reputation as:
 - way around BRAC
 - way to protect site work loads
 - a means to consolidate depot functions
 - a means to protect service specific functions
 - maintaining an existing spare parts production lines

Raytheon & City of Indianapolis

- **Successful public/private partnership**

- **Mission:**

- To support America's Naval Air capability with quality engineering, manufacturing and depot services.
- To support the Navy's modernization of forces by providing significant O & S savings through performance excellence and Best Business Practices.

Raytheon

Raytheon & National Training Center

- **Successful public/private partnership**
- **Mission:**
 - To support a “trained and ready” fighting force for the 21st Century
 - To support Operations Group in providing joint and combined arms training focused on developing soldiers, leaders, and units of America’s Army

Raytheon

Working Hand & Glove

Raytheon and the U.S. Army are working hand and glove providing seamless operations in these areas:

- Instrumentation • Civilians on the Battlefield
- Live Fire • Training Analysis and Feedback
- Organizational Maintenance • System Engineering and Integration
- Battlefield Effects • Logistics
- Timely audio visual support to AAR process minutes after the conclusion of a battle or exchange or engagement

Real time Army/Industry synergy!

Partnership

A Range of Opportunities

**Frederick M. Strader
General Manager, Armament Systems
Division, United Defense**

Crusader 155mm Gun Development Partnership

- United Defense is responsible for all systems
 - no “GFE”
- We selected the XM 297 solid propellant cannon developed by ARDEC
 - completing development under our direction
 - Crusader PM funds ARDEC efforts directly
 - prototype gun production a combination of Watervliet Arsenal, Rock Island Arsenal and United Defense
- Despite technical challenges, gun is on schedule
 - has fired 40Km
 - meeting 10+ rounds/min rate of fire

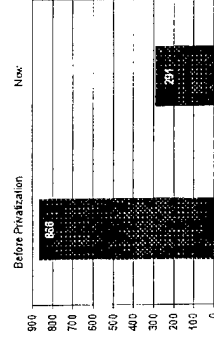
DD 21 155mm Gun

- Private Industry is leading the development of the ships and all systems
 - “no GFE”
- Navy agreed to one core group, headed by United Defense, to develop the gun for both teams
- United Defense will design and produce the gun
- Various Navy Labs will provide support, funded directly by us
- Includes control of projectile/propellant development to allow system optimization

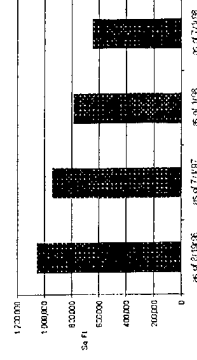
Louisville Privatization

- Overhaul of 5" Guns
- Gun Barrel Production
- Team includes Navy ISEA and LRA
- Raytheon Privatized Separate Product
- Doubled Productivity
- Better Quality and Safety Record
- Consolidated into Less Space
- ISO 9001 certified
- Excellent Award Fee Scores
- But Navy Orders are Lower...
- Now Moving Additional Work to Louisville

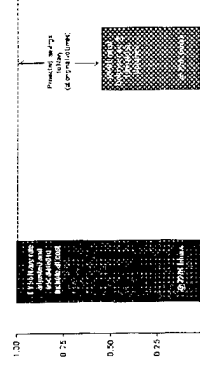
Employment



Floor Space Consolidation



Hourly Charge Rate

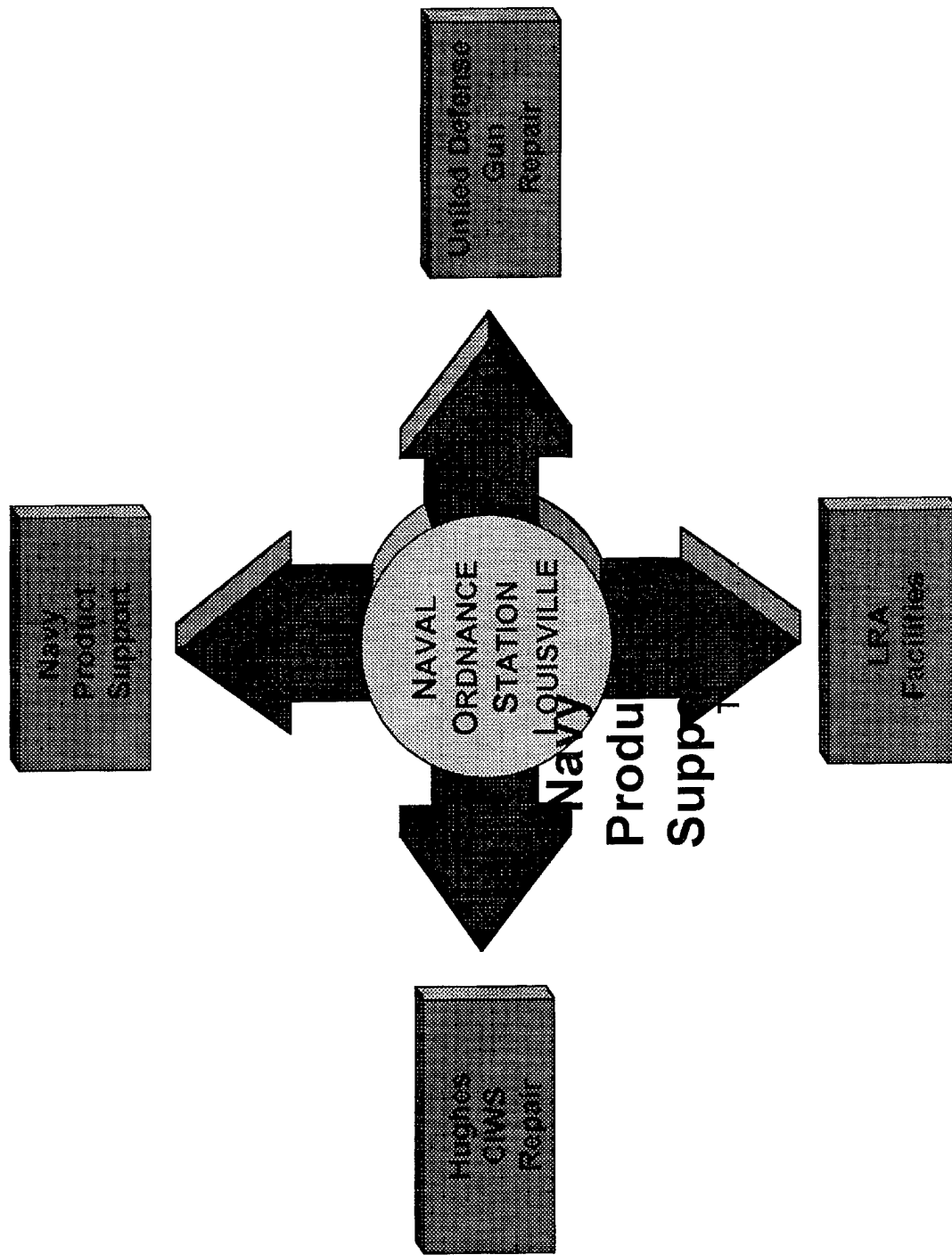


Key Operating Mechanisms

- United Defense - ARDEC Memorandum of Agreement for Crusader Cannon Development
- DD 21 Teaming Agreement
- Louisville Privatization Agreement

Lessons Learned

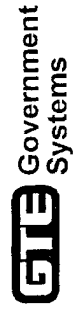
- No One Best Way:
 - A range of models can produce successful results
 - Partnership can make the best use of scarce technical resources
- Biggest obstacles are Fear and Mistrust
 - Rice-bowl issues still exist
 - Must reconcile different ways of doing things
- The Cure: focus on who is the Real Customer, and what are their real needs
- Privatization has its own lessons learned
 - “This is a Political Event”



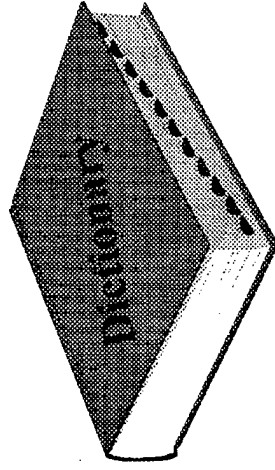
INDUSTRY/GOVERNMENT PARTNERSHIPS FOR SYSTEM SUPPORT



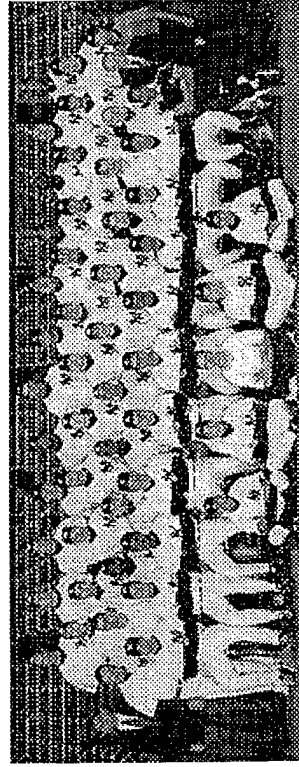
Jerry DeMuro
Vice President & General Manager
GTE Government Systems Corporation
April 19, 1999



What is a partnership?

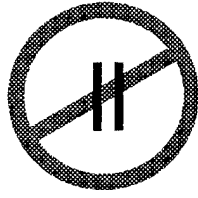


= "a player on the same side
or team as another"



=
"common objectives"
"win/win situations"

All opportunities to partner are not equal

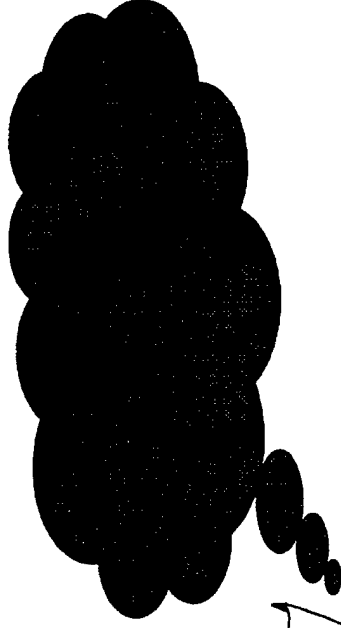
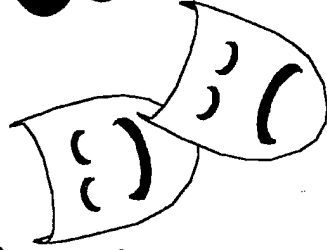
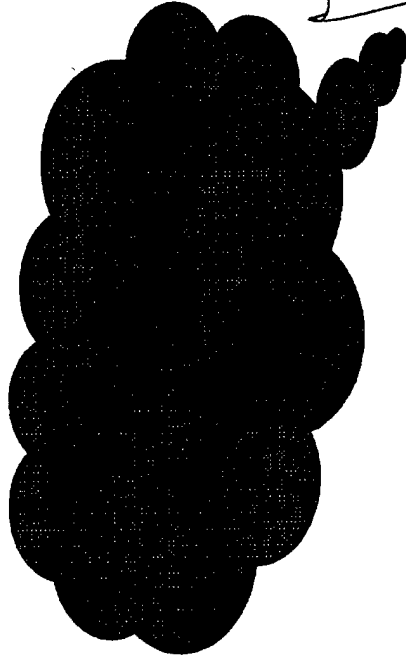


New start program partnerships

- Mutual opportunity to grow
- Work together on political support
- The only loss is opportunity

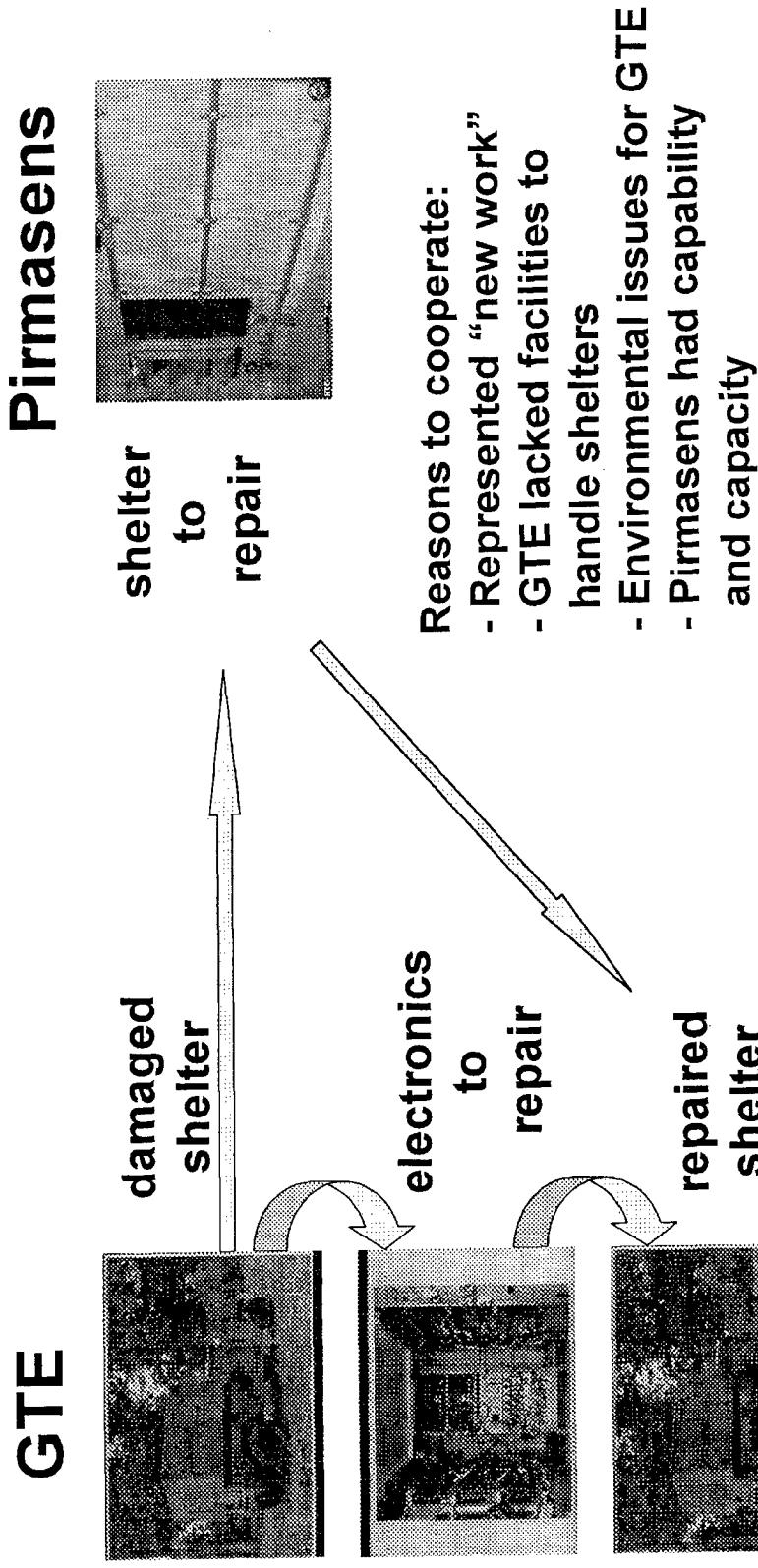
Legacy system support partnerships

- Existing infrastructure
- Competing interests
- The focus shifts to competition



MSE Overhaul in Europe

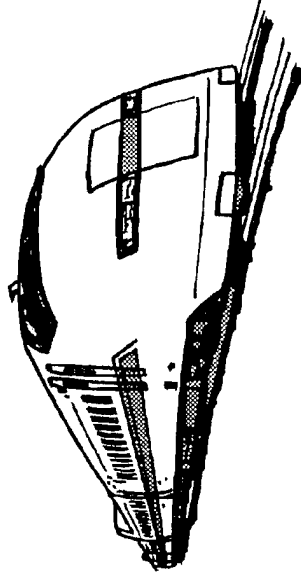
“A legacy system support partnership that works”



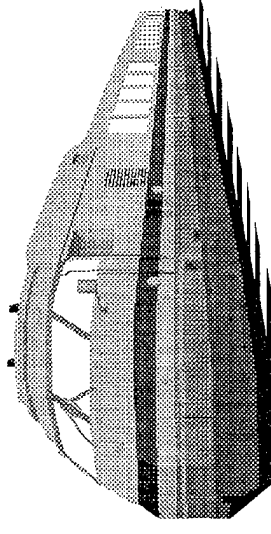
Other experiences with legacy system support partnerships

“More competition than cooperation”

Contractor



Government



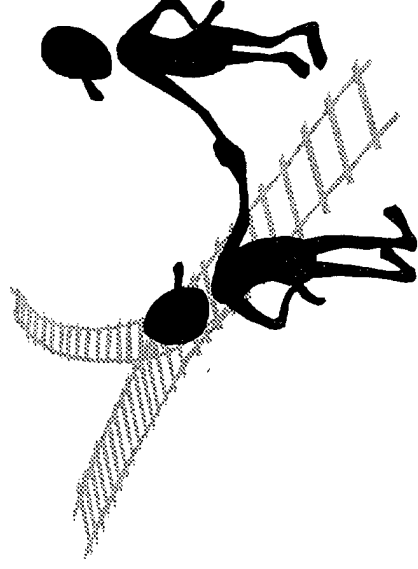
- Workforce Retention
- Excess Capacity
- Funding
- Data Issues



System support partnerships

“Track to success”

- Make system support partnering a part of the integrated acquisition strategy
- Eliminate legal and administrative barriers
- Win/win relationship



ARMY MODERNIZATION

MG Joseph M. Cosumano, Jr.
Assistant Deputy Chief of Staff for
Operations and Plans (Force Development)



DAMO-FD

Agenda

- The Environment
- The Change Process
- Modernization Plan



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The World Has Changed

Cold War

- Overarching US-USSR global struggle
- Direct threat to US survival, primacy
- Stable strategic balance
- European focused
- Less pervasive media

Today

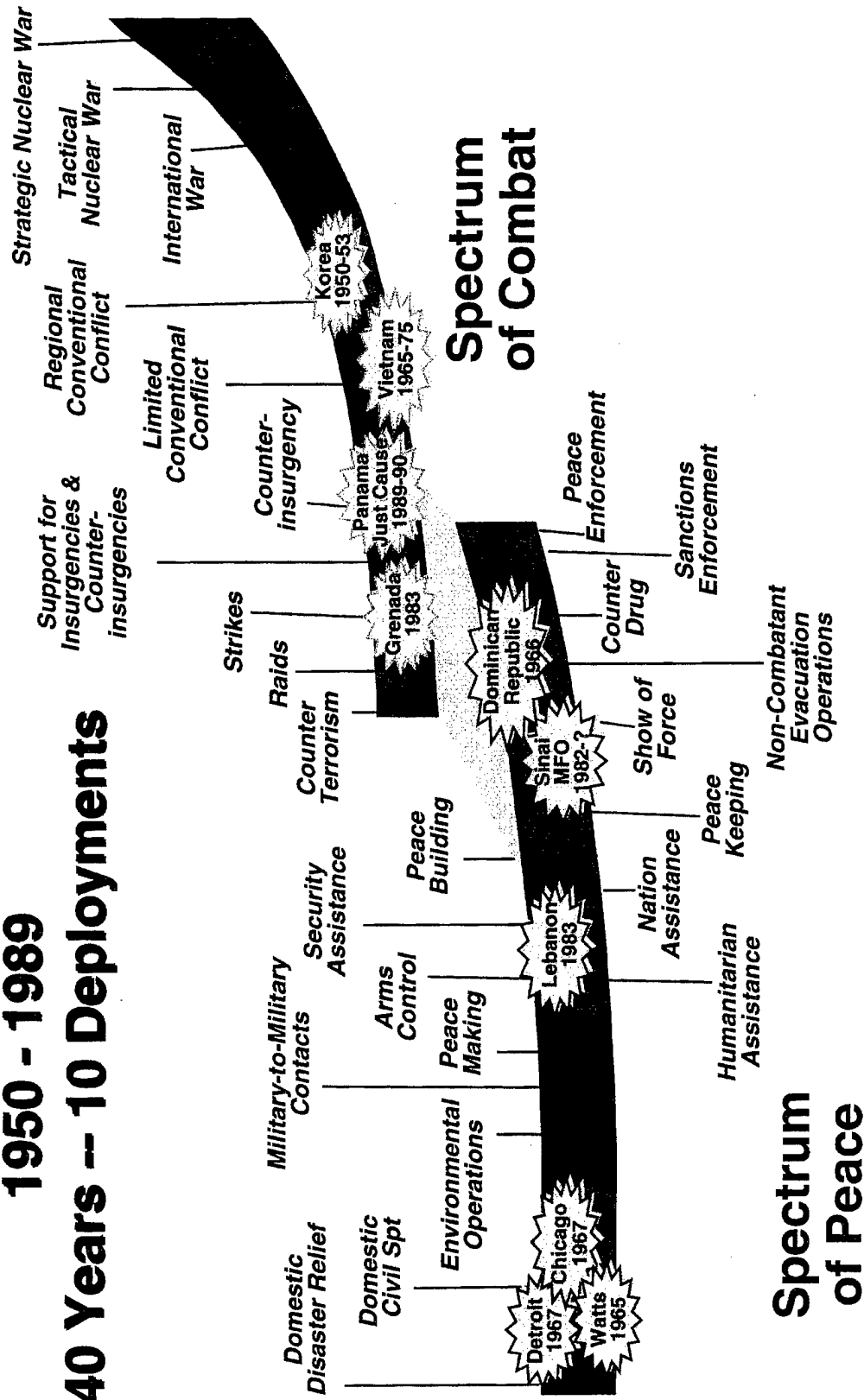
- Asymmetric threats & challenges
- Simultaneous missions across the spectrum of crisis
- Many possible combat contingencies
- "CNN" factor

... Suggesting Increased Demand for Land Forces.



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1950 - 1989 40 Years -- 10 Deployments



[illegible]



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The Army Has Changed too!

TODAY

Cold War Army Power Projection Army Army XXI Army After Next

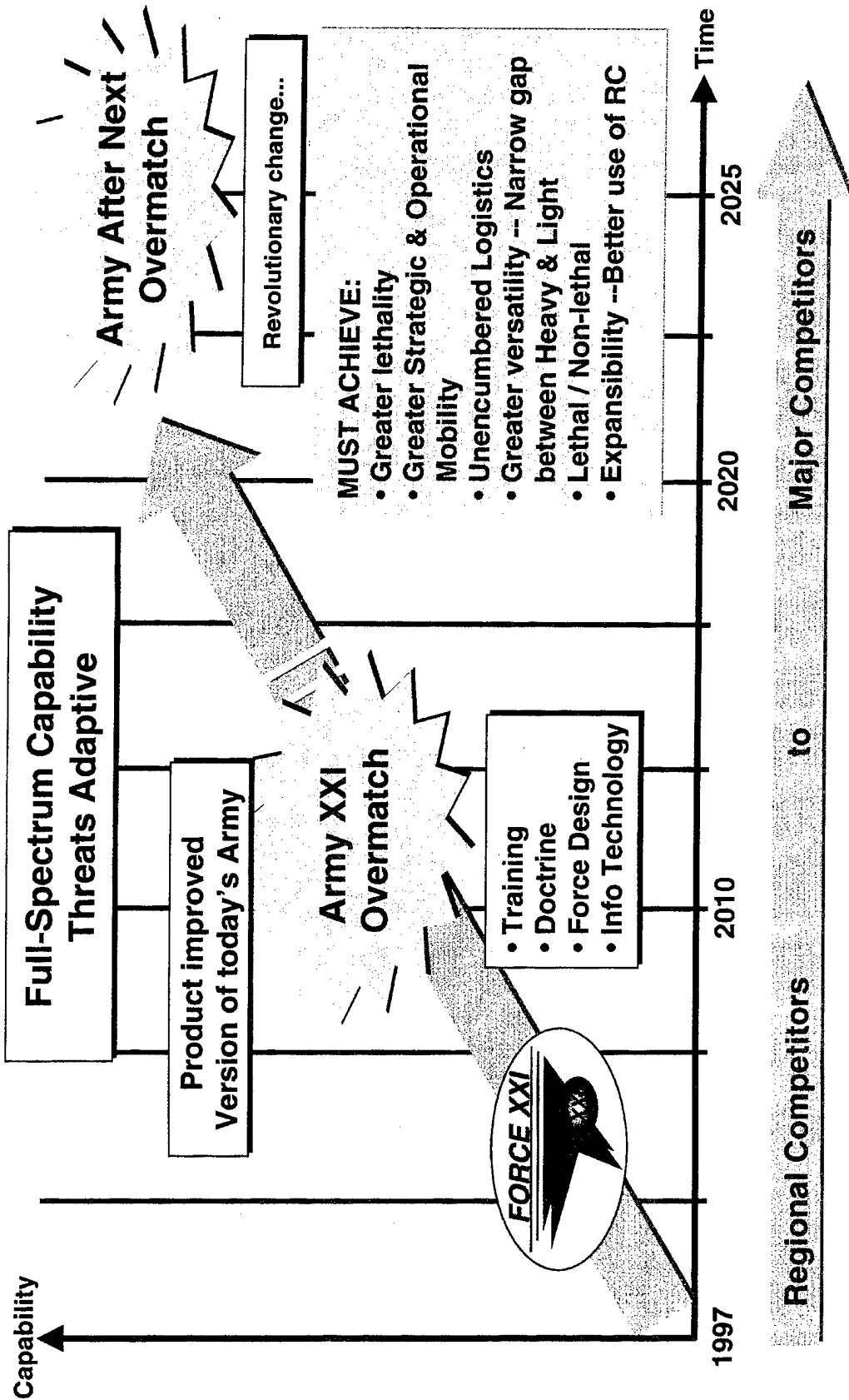
- | | | | |
|---|---|--|---|
| <ul style="list-style-type: none">• Forward Deployed• Threat-based• 20th Century Technology• Longer Planning Horizon | <ul style="list-style-type: none">• CONUS-Based• Power Projection• Broad Mission Range• Constrained Resources• Shorter Planning Horizon | <ul style="list-style-type: none">• Flexible Strategy• 21st Century Technology• Knowledge and Capabilities Based• Lethal and Survivable• Real-time Situational Awareness | <ul style="list-style-type: none">• Surface to Space Continuum• Split-Based, Interdependent Operations• Hybrid Forces |
|---|---|--|---|

And Must Continue to Change



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We Have a Change Process - Force XXI



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4/20/99

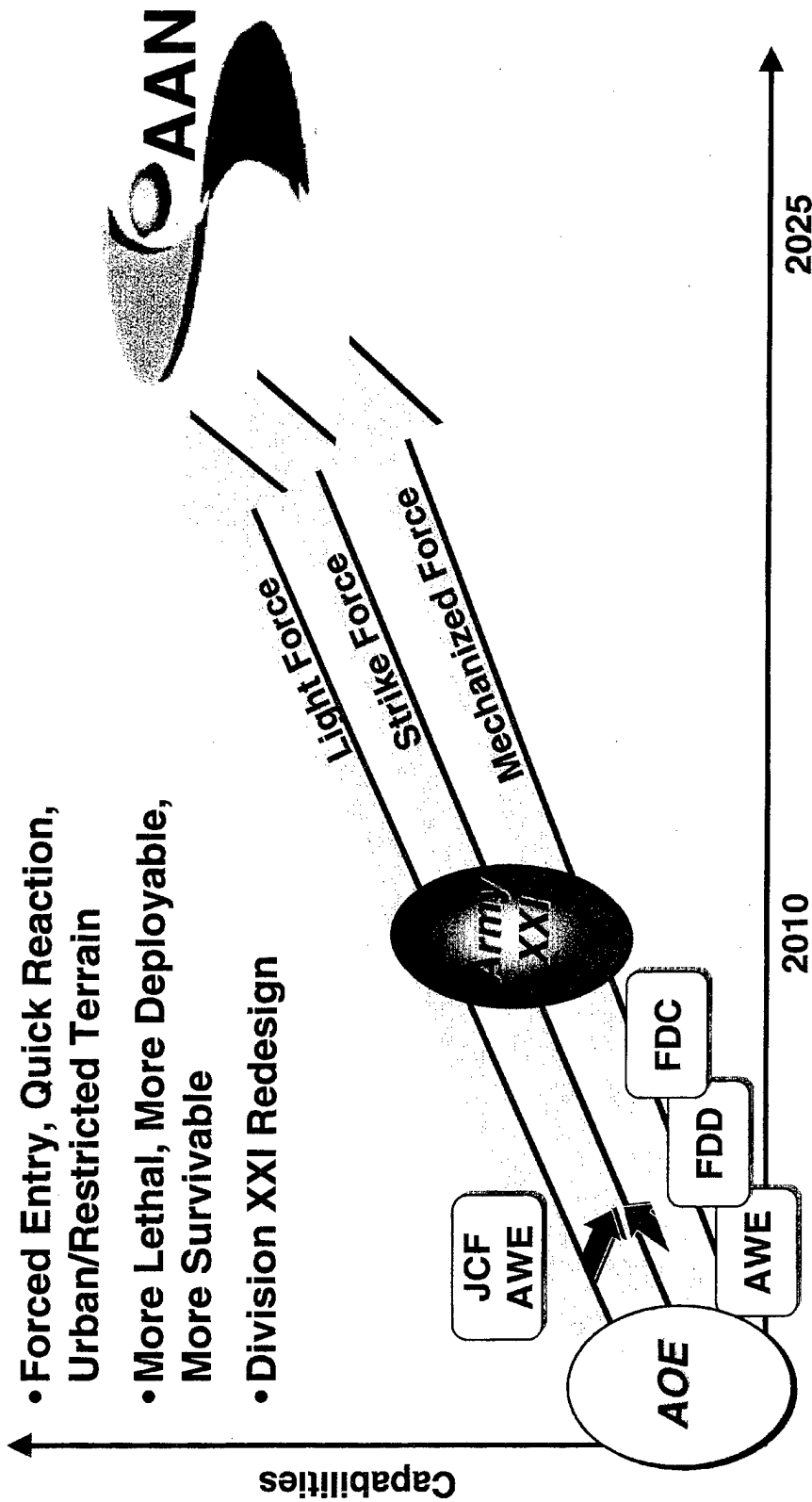
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Army Experimentation Campaign Plan

- Forced Entry, Quick Reaction, Urban/Restricted Terrain
- More Lethal, More Deployable, More Survivable
- Division XXI Redesign

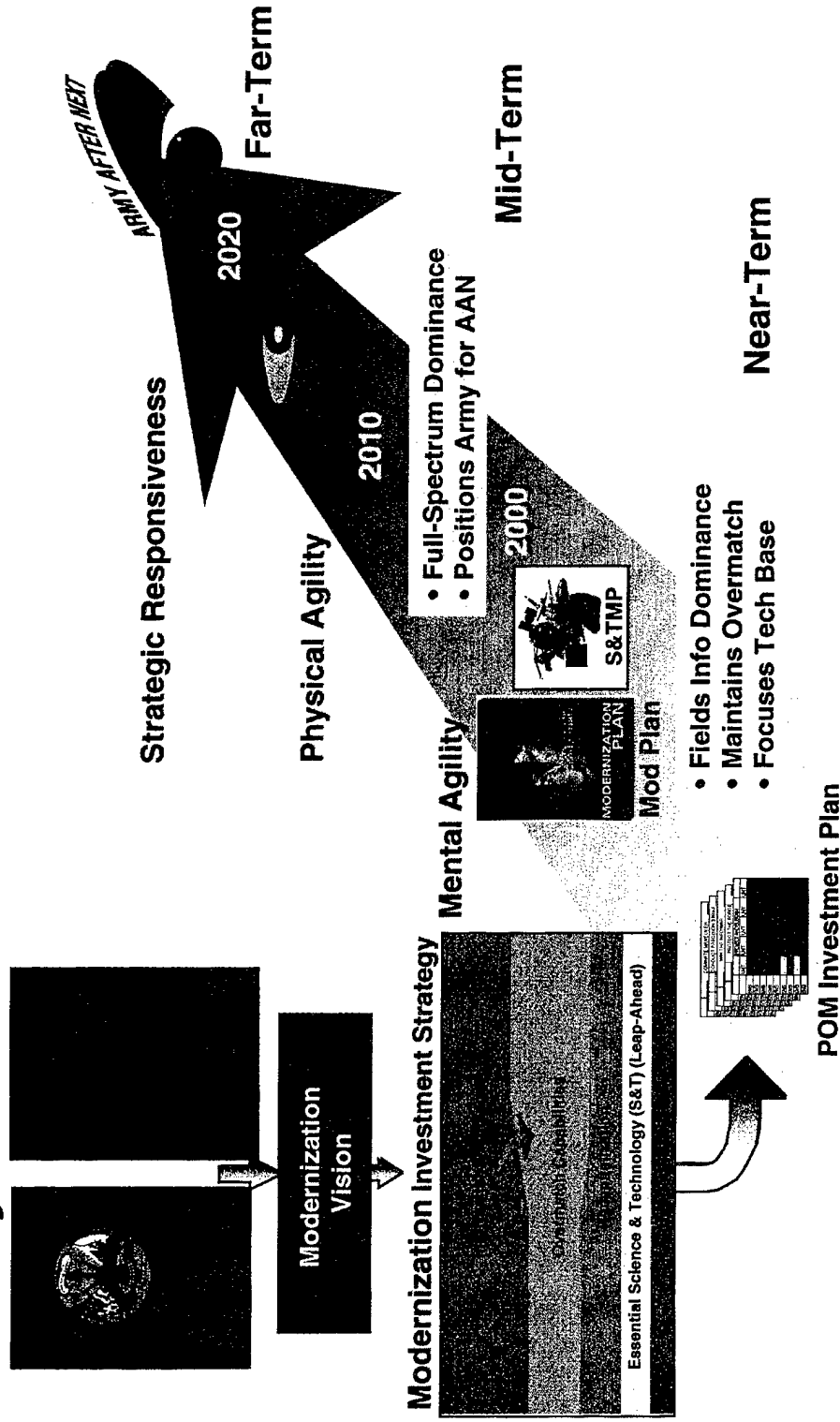


Modernized Doctrine, Organizations, Materiel and Leader Development



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Army Transformation---The Path to AAN

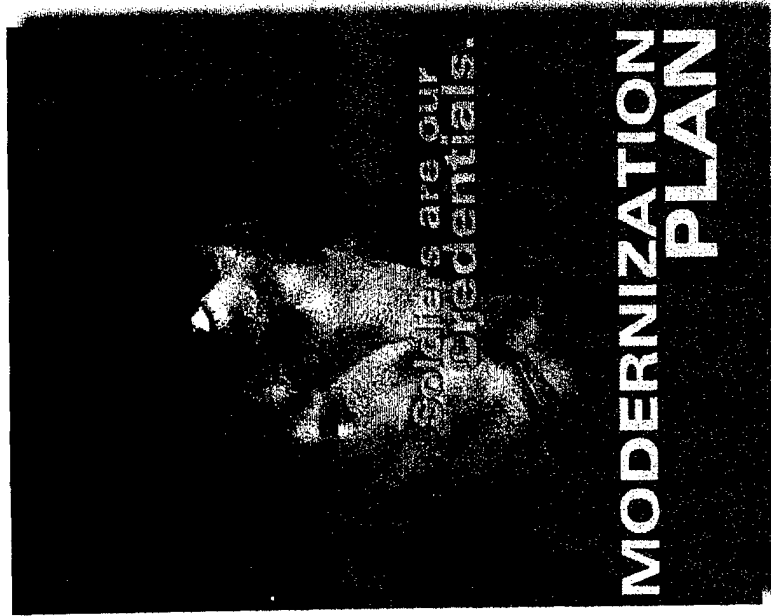


Near, Mid, Far Term Objectives



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We Have a Modernization Plan



Goals

- Digitize the Army
- Maintain Combat Overmatch
- Sustain essential R&D, Focus S&T on Leap-ahead Technology
- Recapitalize the Force
- Ensure AC/RC Interoperability

To Continue Change Over Time



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1999 Modernization Plan Messages

- Moving from Industrial Age to Information Age
- Focusing on Brigade Sets
- One Team, One Fight, One Future
- Resource Constrained Environment -- Balance is Key
- Recapitalize to Modernize



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We Have an Investment Strategy

Overmatch Capabilities

Essential Science & Technology (S&T) (Leap-Ahead)

- Priority on Info Dominance
- Maintain combat overmatch
- Focus S&T on leap-ahead technology
- Fund required recapitalization

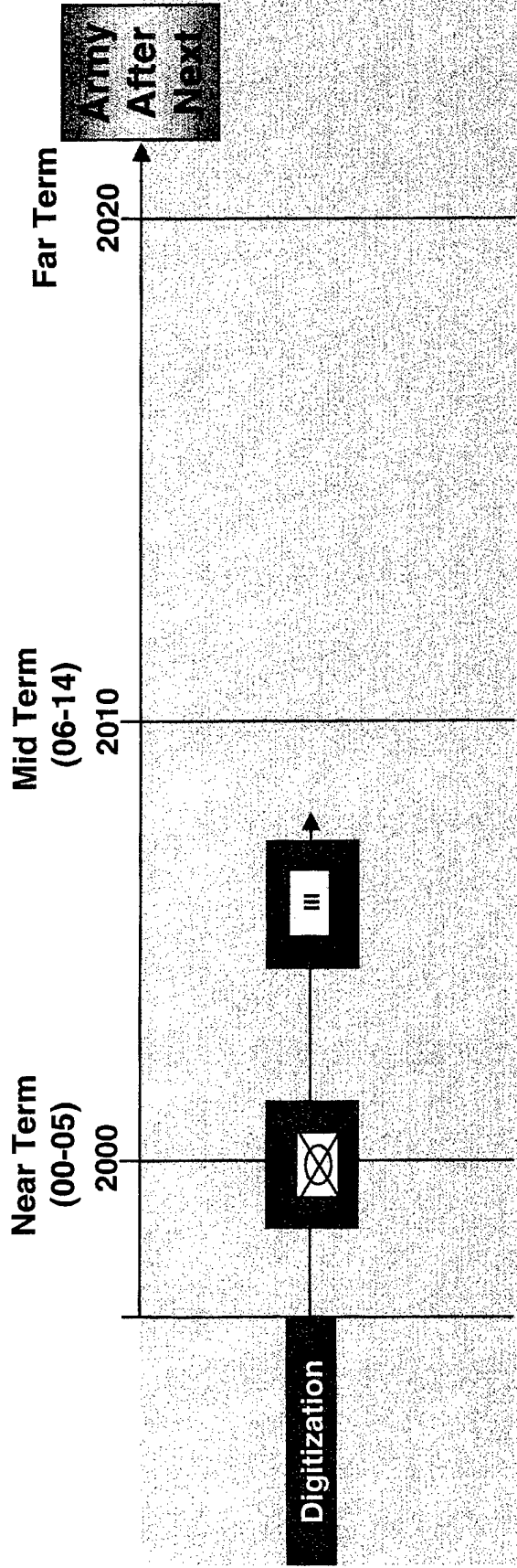
- Continue emphasis on Information Dominance

- Sustain Information Dominance
- Combat capabilities and Information Dominance embedded



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Digitize The Army

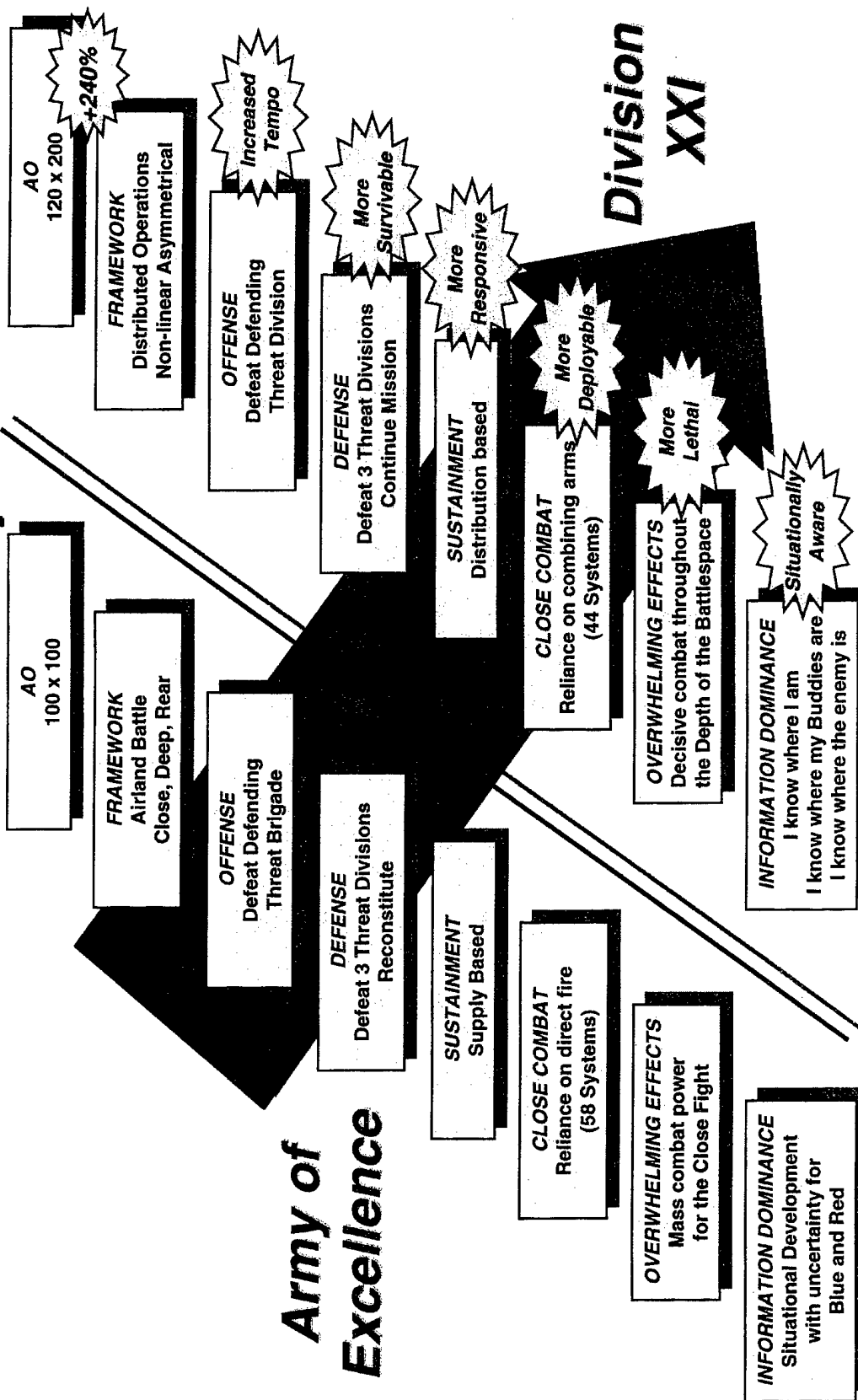


- First Digitized Division by 2000 (4th Infantry Division, Fort Hood, TX)
- First Digitized Corps by 2004 (III Corps, Fort Hood, TX)
- Provides situational awareness
 - Where is the enemy?
 - Where are my buddies?
 - Where am I?
- Uses the Army Experimentation Campaign Plan to determine our azimuth



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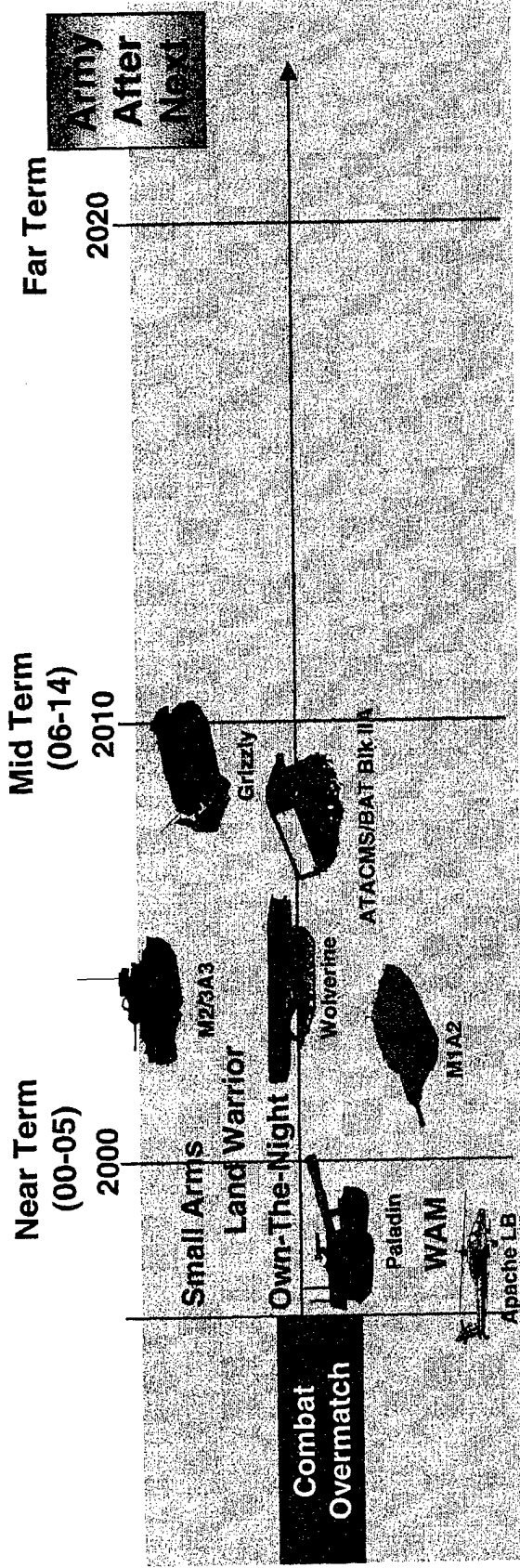
AOE to Div XXI Comparison





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Maintain Combat Overmatch



- Have ground combat overmatch
- Retain this capability through P3I
- Force structure changes and redesign
- Link to R&D initiatives to insert new technologies



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Overmatch

“Things that can make a difference now.”

Primary focus on early entry and light forces

Lethality

- Digitization
- HIMARS: Rapidly deployable overmatching fire support
- M4 Carbine: Light-weight, adaptable small arms
- TOW2B Fire & Forget: Low-cost, low-risk lethality hedge against TOW2B obsolescence

Survivability

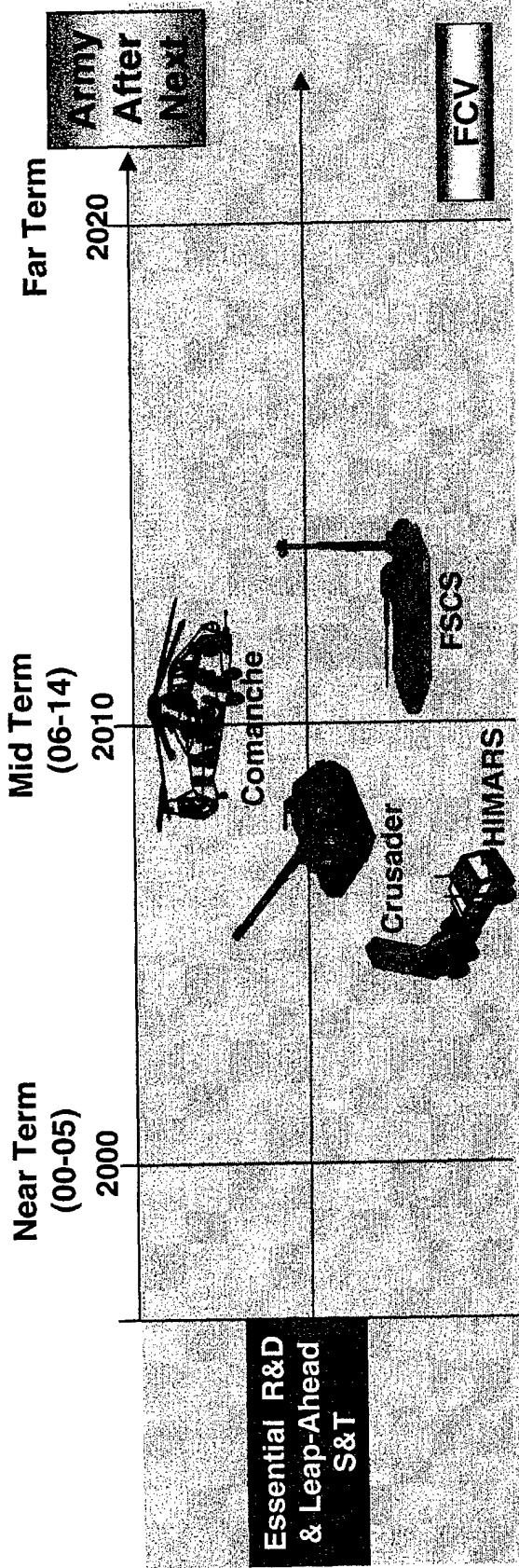
- Soldier System Enhancements:
 - Body armor: Survivability enhancement
 - Soldier Support items that meet basic soldier needs for con ops
- Night vision/thermal sights: Gives soldiers night-fight overmatch

Small dollars . . . large impact for the Soldier



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Sustain Essential R&D & Leap-Ahead S&T

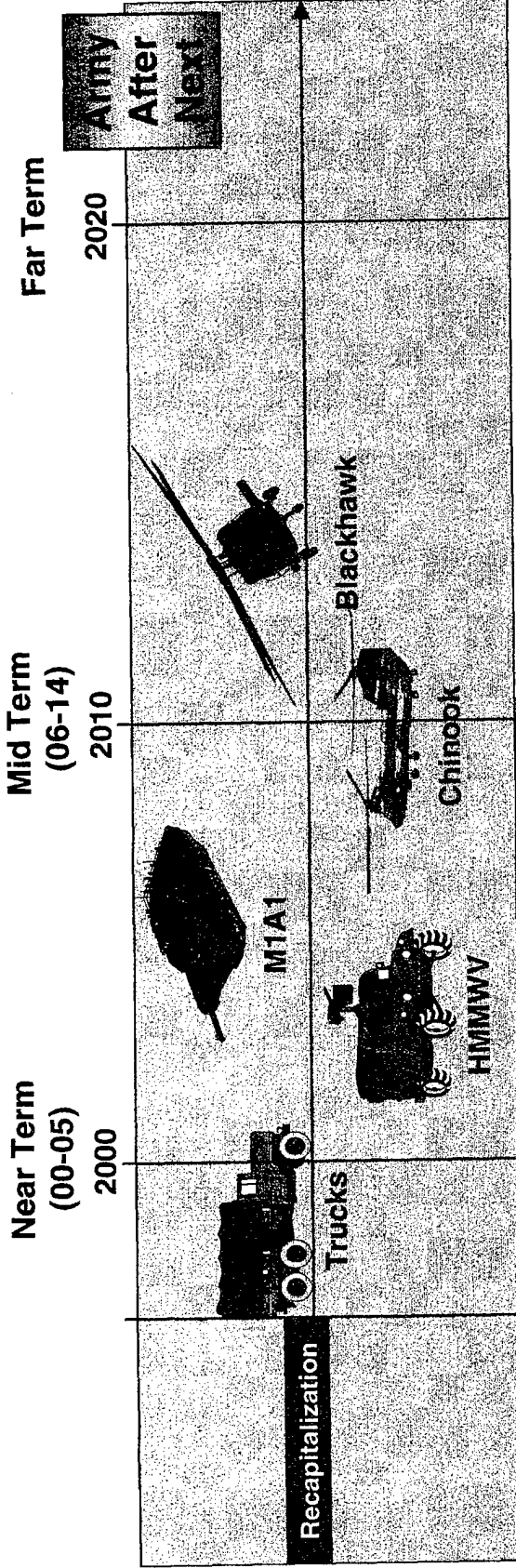


- Focus Science and Technology (S&T) on Next Generation Capabilities.
 - Lighter.
 - More Mobile.
 - More Supportable.
- Maintain technical overmatch in the near and mid terms.



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Recapitalize The Force



- Increased fleet age and operations and sustainment cost.
- Legacy systems will be in the AAN inventory.
 - Wheeled Fleet
 - CH47
 - Blackhawk
 - Abrams
 - Bradley
 - MLRS
 - Stinger



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\$1-2B Needed Each Year to Recapitalize to Modernize

Trucks

Costs \$1.3B Per Year To
maintain Trucks Age at 13.5
Years



CH47

Improved Cargo
Helicopter modification
Will Reduce Costs By
\$2.6B



M1A1 Tank

Engine Mean Time
Between Failure Can
Be Increased By
300%



UH-60

Flying Hour Cost
Can Be Decreased
By 1/3



- Operation & Sustainment Costs take \$ From Modernization
- Can Not Continue to Defer Paying on the Principal



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Recapitalization

"Steps with big future payoff."

Primary focus on mechanized forces and aviation

Mechanized Force

- Improved recovery vehicle
- Abrams/Bradley power pack replacement
- Modernize M113 Family of vehicles to A3 variant

Aviation Fleet

- CH-47 Upgrades
- UH-1 Sustainment and Light Utility Helicopter
- UH-60 SLEP and UH60Q MEDEVAC
- UH60 for RC

***Reduces O&S costs and meets long-term
reinvestment needs.***

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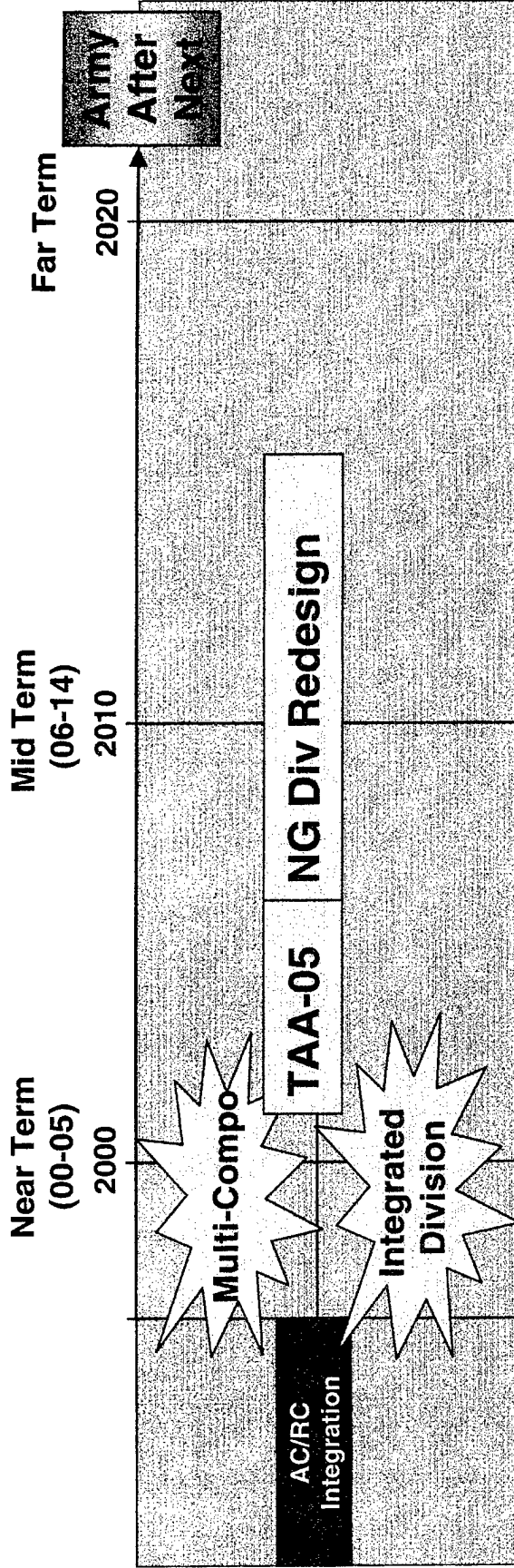
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Ensure AC/RC Interoperability



- Building a seamless force for the future.
- RC modernized along with their Force Package.
- Initiatives:
 - Multi-compo units.
 - Integrated Divisions
 - Army National Guard Division Redesign.
 - Division Teaming



DAMO-FD

Modernization Of the Reserve Component

A Success Story...

- Provided over \$21.5 Billion between FY 92-99*
- Programmed over \$7B in FY00-05 for Reserve Component Modernization
- Reserve Component Modernization at highest level since 1962

* Current Dollars



Air Defense



Combat Vehicles



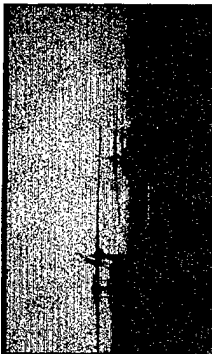
Attack Helicopters



Fire Support



CSS Systems



General Support Avn

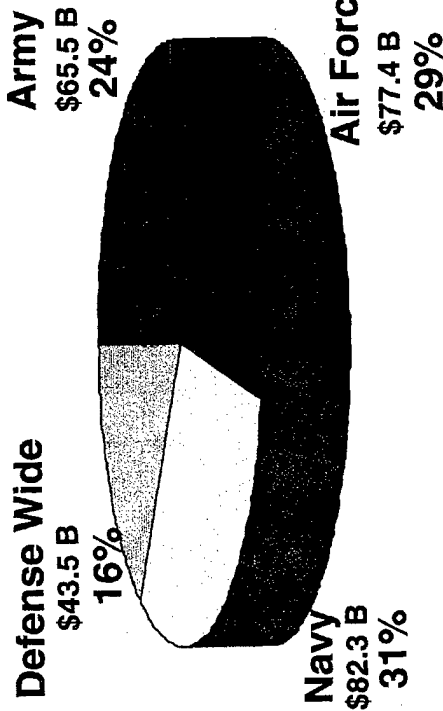
Programmed AC & RC Force Structure Reductions Helping to pay the bill



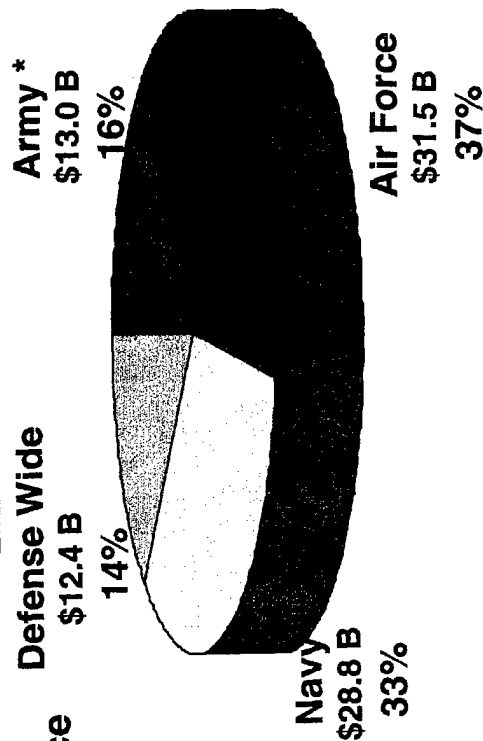
DAMO-FD

Where The Money Comes From FY00 BUDGET

DoD TOA = \$267.1 B



DoD RDA TOA = \$86.8 B

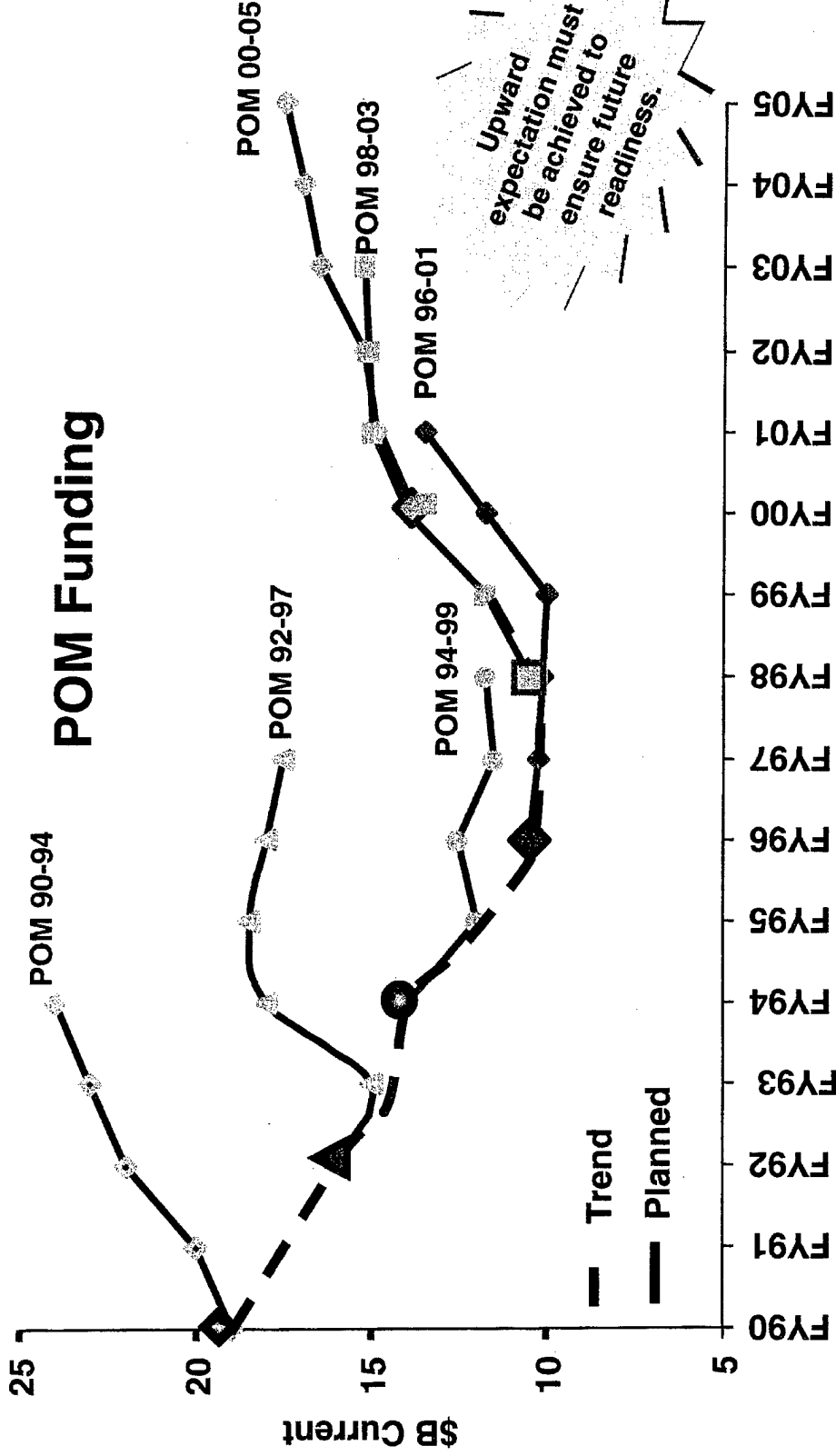


* Army RDA does not include Chem Demil



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Resource Constrained Environment

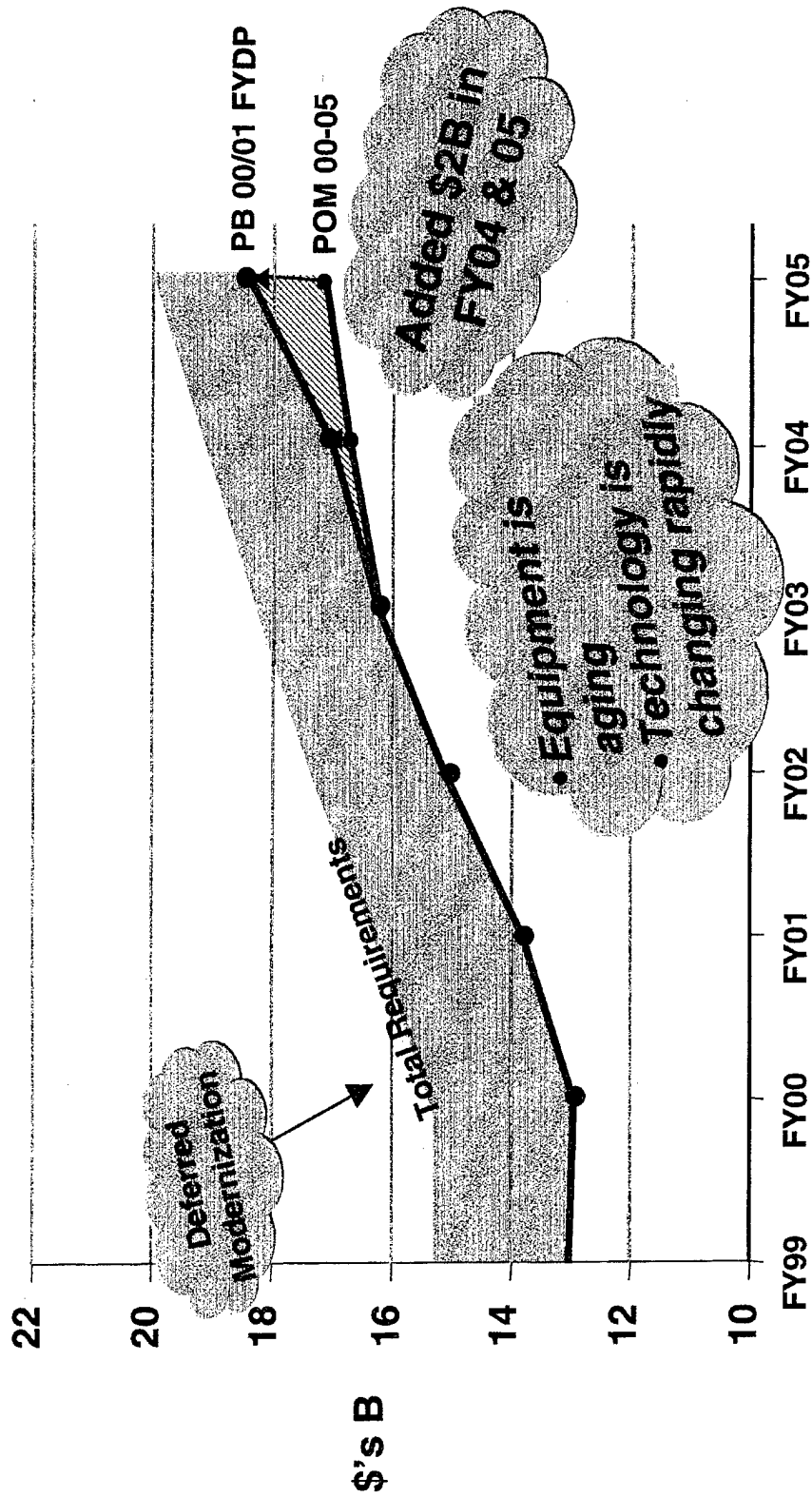


We Need \$2-3B/Year to meet our priority modernization needs



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Resource Constrained Environment





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Army Challenges

- Remain trained and ready.
- Transform the Army through Force XXI process.
- Ensure both current and future readiness in an era constrained resources.
- Reduce risk in the near and far term.
 - Training
 - Use of Total force



DAMO-FD

Army Has Changed

The Army has changed to meet the nation's changing needs.

We are well along the pathway.

Continuing to change even while performing missions around the world.

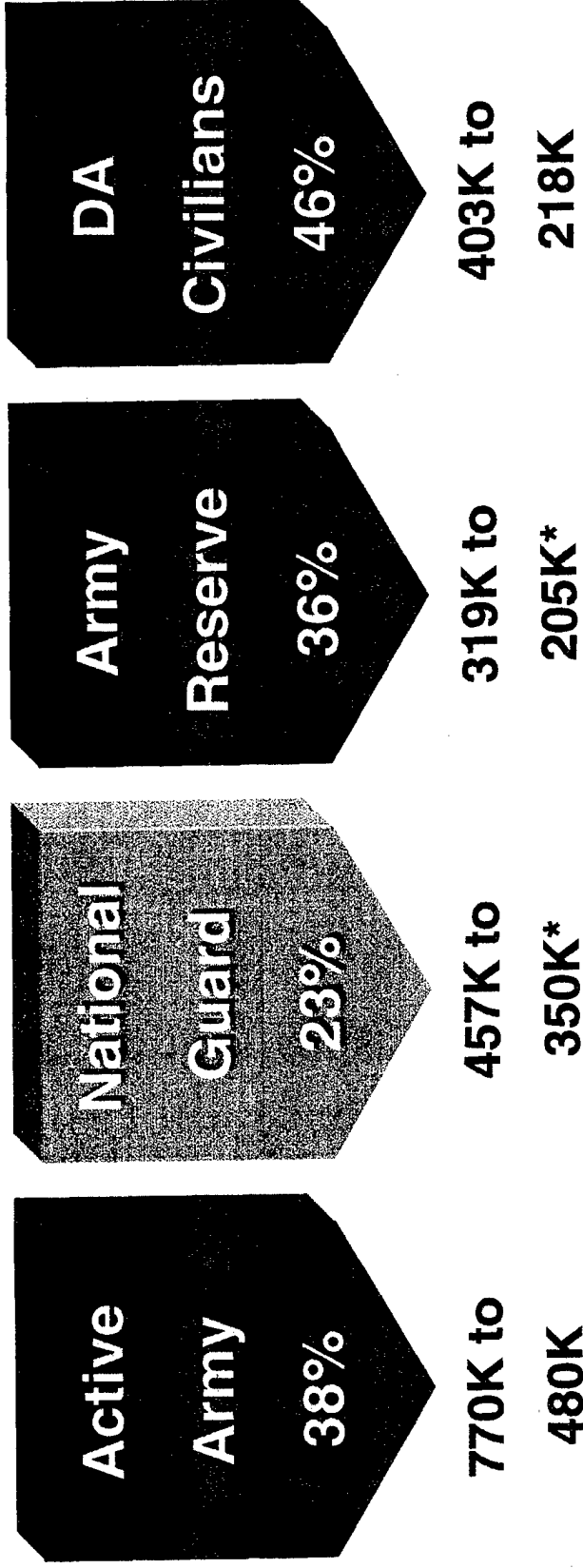
But Resources are still Needed . . .

One Team, One Fight, One Future

Force Structure Reductions

■ The QDR directed reduction in both End strength and Force Structure

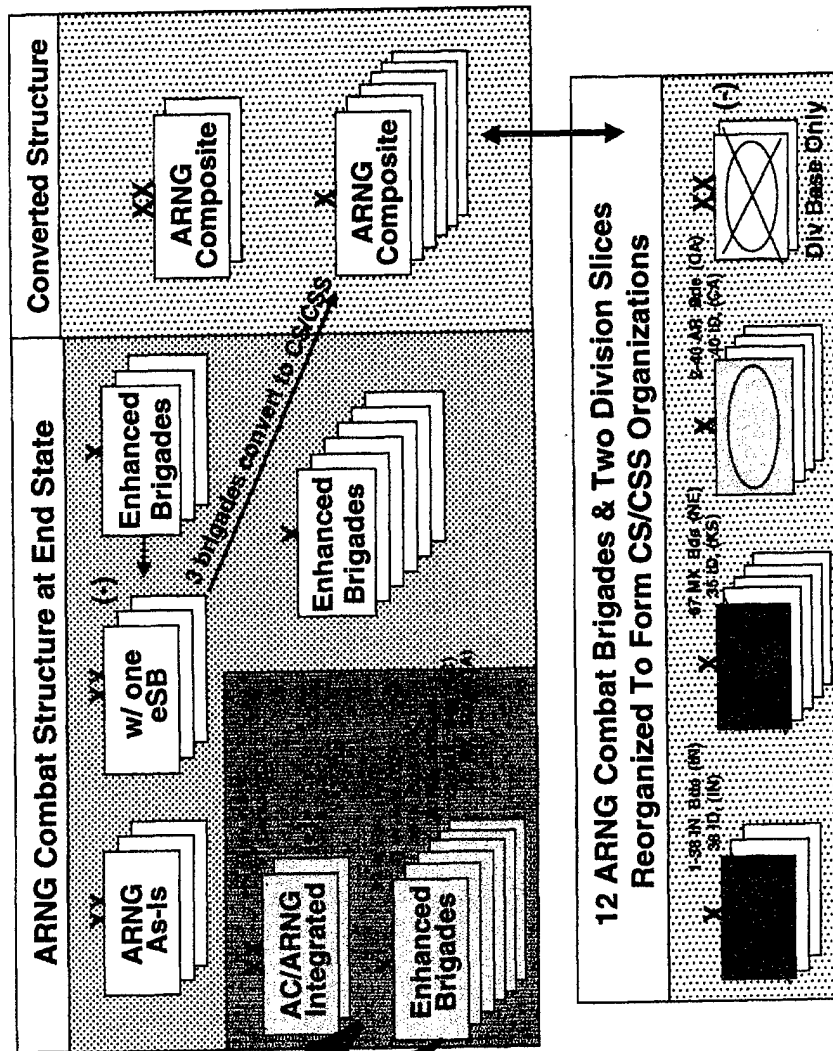
Personnel Reductions from 1989-2000



* 25K of RC reduction TBD

Projected Savings Already Reinvested in Modernization & Readiness

ADRS Implementation



- 3 divisions remain in current configuration.
- 3 divisions with 1 enhanced Separate Brigade (the eSB displaces a divisional maneuver brigade and becomes the third brigade in the division).
- 2 ARNG composite divisions (formed by reconfiguring 2 existing ARNG divisions).
- 6 stand alone composite brigades. The brigades are formed from the conversion of initial six brigades to convert.
- 6 stand alone eSBs.
- 6 eSB's as part of the two AC/ARNG Integrated Divisions.

Multi-Compo



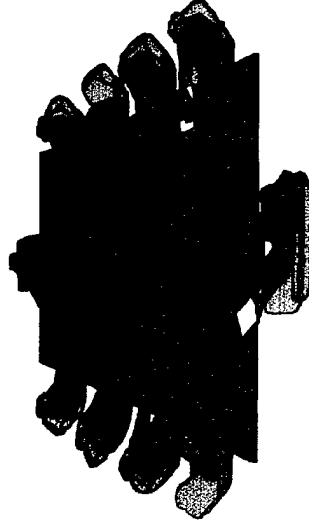
A readiness partnership for America's Army

INITIAL UNITS

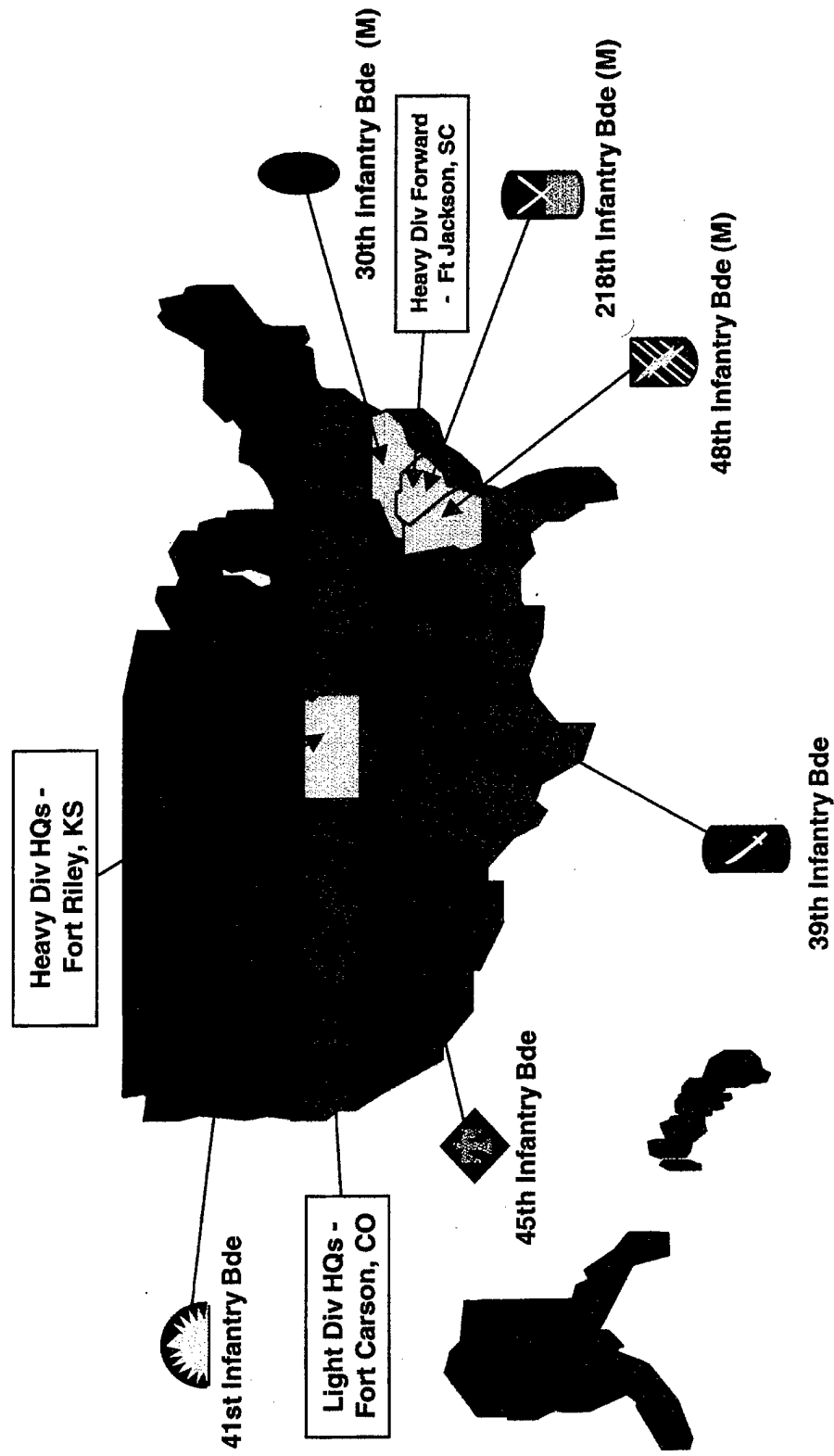
- **AC flag with ARNG element(s) :**
 - 1-159th Command Aviation BN
 - 46th Engineer BN
 - 32d Army Air & Missile Defense CMD
- **AC flag with USAR element(s) :**
 - 122d Military Police DET
 - 673d Dental CO
- **ARNG flag with AC element(s) :**
 - HHC, 142d Signal BDE
 - 1-171st Combat Support Aviation BN

Effective date for each of the initial units is 16 October 1999, except for the 32d Army Air & Missile Defense CMD, which has an effective date of 16 October 1998.

- **USAR flag with AC element(s) :**
 - 304th Corps Materiel Management CTR
 - HHC, 3rd Medical CMD
- **AC flag with both ARNG & USAR element(s) :**
 - Army Service Component CMD South
 - 52d Engineer BN
 - HHC, 93d Signal BDE



Integrated Division Headquarters and eSB Locations



The Army's Future

DIVISION XXI

SEAMLESS INTEGRATION

- Multi-component Unit, single TOE
- 512 RC Positions throughout the Division
- 255 USAR 257 ARNG
- Enhanced cohesion
- Train as you fight

COMMAND AND CONTROL

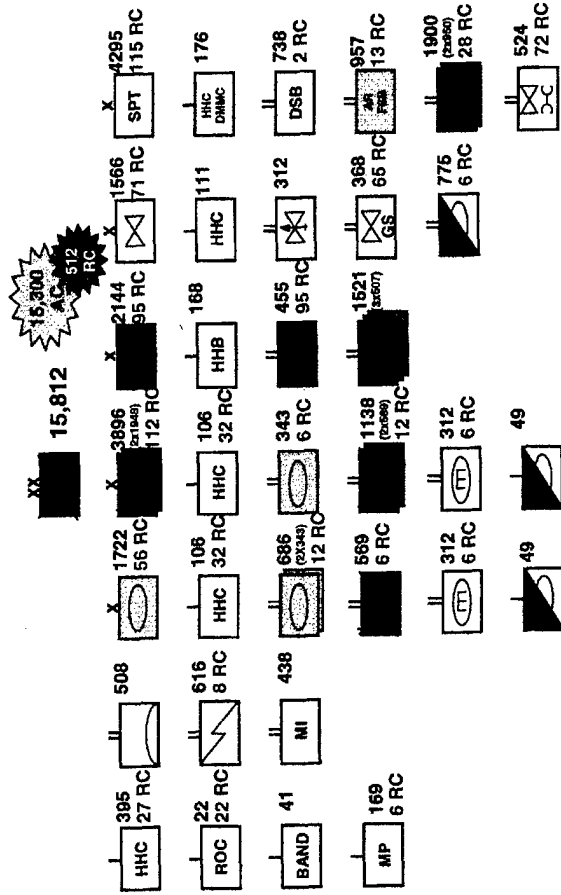
- Increased Battlespace
- Division Rear and Main Command Post collocated
- Mobile C2 In C2Vs
- Signal planning done in Div G6
- Added Information Operations Cell
- Added Rear Operation Center

MANEUVER

- 44 platforms per battalion
- 4 vehicles / platoon, 3 companies / battalion
- 3x9 Infantry Platoons
- Added Brigade Recon Troop to maneuver BDE
- Standardized mortars
- Organization, 4 tubes per BN
- Reduced and standardized scouts
- Centralized CSS

FIRE SUPPORT

- Eliminated FS below Co level
- Created Striker organic to 155 FA Bns, DS to Brigade Recon Troops
- Created MLRS / Target Acquisition BN
- Downized Paladin crew from 9 to 8
- Optimized for improved weapons / munitions



COMBAT SERVICE SUPPORT

- Centralized CSS for Maneuver & Engineer
- Distribution based supply system
- Reduced Stocks
- Self-sustaining for limited period
- Passbacks to Corps of some functions
- Implemented enablers (multi-function mechanics, FRS-H, TIGER, etc)

MOBILITY, COUNTERMOBILITY, SURVIVABILITY

- Removed EN Bde C2, put planning cell in division staff
- Streamlined EN HHC
- Redesignated EN Co
- Assumed GRIZZLY savings early
- NBC Recon in Div Cav Sqdn
- Centralized CSS

INTELLIGENCE

- Added additional Analysis Control Team for Aviation or DIVARTY use
- Increased S2 strength in Avn and Cav Squadron
- Increased interface with assets external to the Division
- Added UAV
- Removed GSR Teams

AIR DEFENSE ARTILLERY

- Implemented SHORAD system of systems
- Removed MANPADS
- Added Sentinel Platoon

Mass Effects throughout the battlespace

Strategically Relevant to NCA Requirements

Rapidly Focus Lethality Precision Maneuver

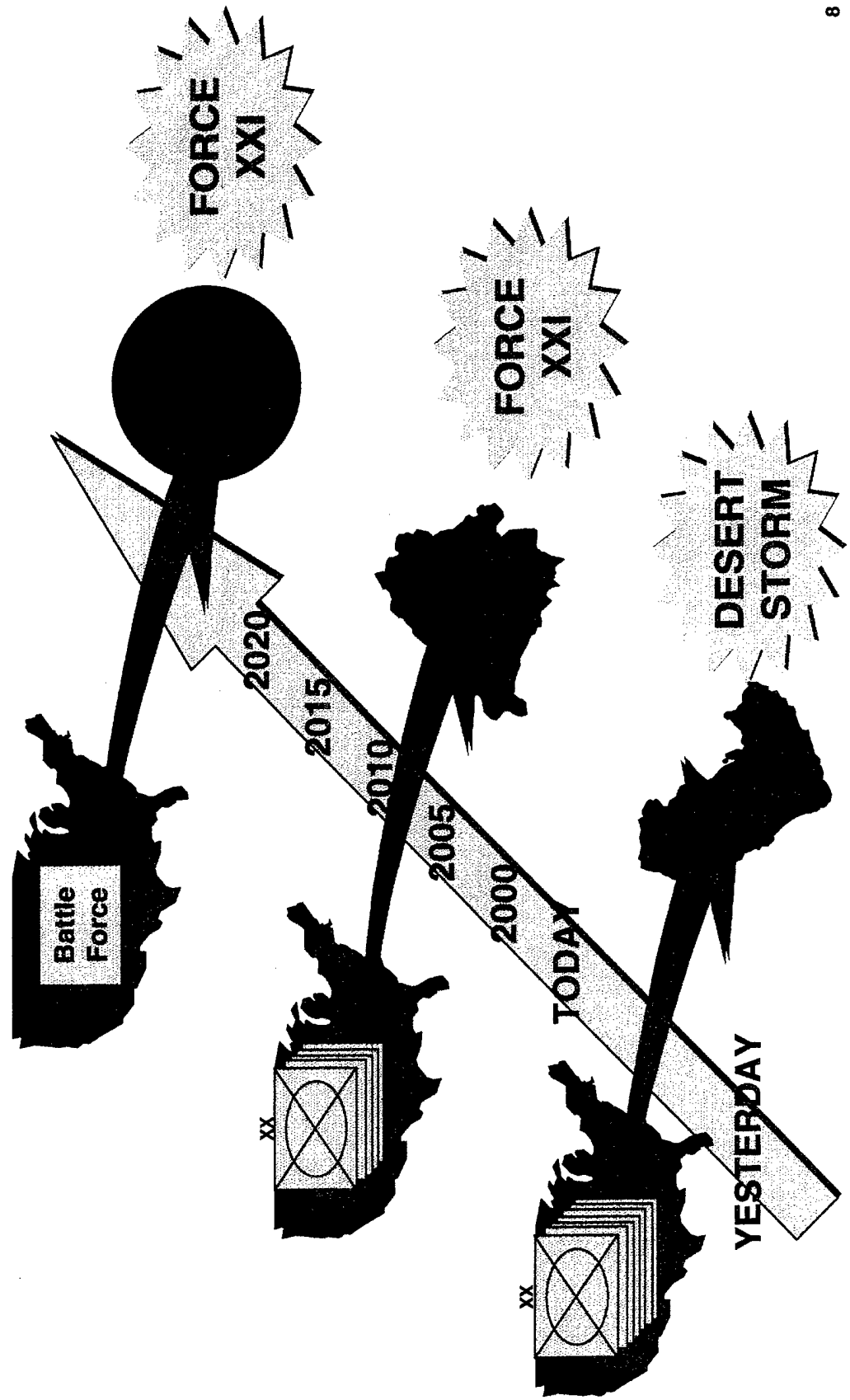
One Team, One Fight, One Future

Army Deployability Initiatives

- **Airlift:**
 - Procurement of additional C-17s (36 of 120)
 - Complete by FY04
- **Sealift**
 - RO/RO 31 of 36 acquired
 - LMSR 4 of 19 acquired
- **Railcars:**
 - 1226 of 1405 acquired (87%)
 - Complete by FY00
- **Containers:**
 - 3759 of 17983
 - Complete by FY03
- **C2:**
 - Power Projection Automation Support
- **APS:**
 - Total value of APS is \$15B

We're Making Steady Progress

21st Century Power Projection



NMD

OPERATIONAL CONCEPT

- Provide homeland defense against proliferating weapons of mass destruction and ballistic missiles.
- Develop and test elements of an initial NMD system within three years FY97-99.
- Conduct integrated system test NLT 1999 to support an informed deployment decision in 2000.
- Following the integrated test and if threat so warrants and a decision to deploy, procure and deploy an NMD system over the following five years (year 2000 through 2005).
- If the decision is not to deploy, continue enhancements of elemental technologies until a decision for deployment is made.

OPERATIONAL REQUIREMENT

- Defend United States homeland (50 states) against limited strategic ballistic missile attack by a rogue nation, should such a threat emerge.
- Provide some capability against a small accidental or unauthorized launch of a strategic ballistic missile from nuclear-capable states.
- NMD ORD validated by JROC - March 1997.

FIELDING

- Potential FY05 deployment (IOC - 05).
- Raytheon design selected as the NMD Exoatmospheric Kill Vehicles (EKV).
- Prototype ground-based radar (GBR) and test facilities at Kwajalein complete and radar is operational.
- Commercial-off-the-shelf booster selected as the Ground Based Interceptor booster.
- At least two candidate system deployment sites - North Dakota and Alaska.

ISSUES

- No Lead Service for the NMD program.
- No lead for user support (Army - Combat Developer).
- Anti-ballistic Missile Treaty will require modification once deployment decision is made.
- Details of transition of funding from Joint Program Office to Army.

THAAD

LTC Jordan/DAMO-FDE/697-1087

OPERATIONAL CONCEPT

- Normally Integrated into a Task-Organized Force with Other Members of the Family of Systems (FoS) to Provide Near Leakproof Two Tier Defense
 - Against the Short and Medium Range Ballistic Missiles
- Maintains Wide Area Coverage Against Critical Assets and Selected Geopolitical Targets
- Employs Shoot-Look-Shoot Firing Doctrine (Preferred) with Final Kill Assessment and Hand-over to Lower Tier System, if Required
- In the TMD Task Force, one THAAD Btry will Operate with a Lower Tier System (e.g., Patriot Bn, MEADS Bn)

OPERATIONAL REQUIREMENT

- Provides Defense Against Medium Range Ballistic Missiles (MRBM)
- When Coupled with a Lower Tier System, Provides Near Leakproof Protection and an Upper Tier Capability against Short Range Threats
- Uses Hit-to-Kill Technology for Defense Against WMD
- Interoperable With Other Army, Services, and Allied systems
- High Single Shot Kill Probability; Higher with Double Shots; Highest with Two Tier
- Large Defended Area

FIELDING

- Contingency Capability FY02; FUE FY08
- Total Fielded Program Includes: 1233 Missiles; 80 Launchers, 12 Radar/10 BMC4I's Support Equip

ISSUES

- Failure to Achieve Intercepts in Test Program (5 of 5 Non-Hits)
- Congressional and OSD Support Exists for Continuing Test Program (5 Shots Remaining)
- Insufficient Funding to Maintain FY07 FUE; Slipped to FY08
- Congressional Appropriation of \$445.3M versus \$822M in PB
- BMDO and PEO, AMD Reworking Program Based on Latest Guidance

ATACMS Block I/IA

OPERATIONAL CONCEPT

- Engage targets long-range, laterally, and at depth. Disrupt and destroy threat forces and long-range weapons before they can influence the battle.
- Advanced, non-nuclear family of long-range missiles and munitions to attack maneuver, C2, air defense assets, and key logistic facilities.

- Block I (950 M-74 APAM) -- 165km
- Block IA (300 M-74 APAM) -- 300km

OPERATIONAL REQUIREMENT

- Attack enemy combat forces not yet engaged, destroy enemy capabilities w/immediate impact on the tactical battle
- Current cannon/rocket munitions are inadequate to effectively attack or defeat high payoff, moving or stationary point and area targets at operational depths
- Analysis: ORD approved Jan 99, MS IV COEA Final Report Sep 93.

FIELDING

Block I: FUE AMC 4Q90 -- 683 msIs
 USAREUR 4Q91 -- 407 msIs
 EUSA 4Q91 -- 344 msIs

Block IA: FUE EUSA 2Q98 -- 150 msIs
 AMC 3Q99 -- 234 msIs
 USAREUR 1Q01 -- 117 msIs

ISSUES

- Production is complete on Block I.
- No issues.
- Professional Staffers: John Young (SAC), Steve Nixon (HAC), John Barnes (SASC), Bob Lauthrup (HASC).
- REP Bill Young (FL) (Chairman, House Appropriations Subcommittee - National Security), REP Silvestre Reyes (TX - ATACMS missile "built" in Horizon City), SEN Hutchinson (TX)

ATACMS Block II/IIA-BAT

LTC Reagle/DAMO-FDG/693-4873

OPERATIONAL CONCEPT

- Engage targets long-range, laterally, at depth. Advanced, non-nuclear family of long range missiles and munitions to attack moving armor, MRLs, and SSM TELs.
- BAT -- moving armored formations
 - P3I BAT -- stationary or moving/hot or cold armored combat vehicles and SSM TELs.
- Block II (w/13 BAT or P3I BAT) -- 140km
- Block IIA (w/6 P3I BAT) -- 300km.

OPERATIONAL REQUIREMENT

- Kill multiple targets in the deep battle; accommodate for large target location error (TLE)
- Current cannon/rocket munitions are inadequate to effectively attack or defeat high payoff, moving or stationary point and area targets at operational depths.
- Analysis: ORD approved Jan 99, Block II COEA Final Report Jan 95.

FIELDING

Block II: FUE AMC 4Q00 -- 626 msIs
EUSA 2Q01 -- 219 msIs
USAREUR 3Q01 -- 311 msIs

Block IIA: FUE AMC 1Q04 -- 309 msIs
EUSA 3Q04 -- 109 msIs
USAREUR 3Q05 --155 msIs

ISSUES

- ATACMS/BAT requesting LRIP decision from DAB on 22 Feb 99.
- Highly successful Production Qualification Tests concluded in Dec 98.
- Professional Staffers: John Young (SAC), Steve Nixon (HAC), John Barnes (SASC), Bob Lauthrup (HASC).
- REP Bill Young (FL) (Chairman, House Appropriations Subcommittee - National Security), REP Silvestre Reyes (TX - ATACMS missile "built" in Horizon City), SEN Hutchison (TX), SEN Sessions (AL) - BAT production to be moved to Redstone Arsenal.

SADARM

OPERATIONAL CONCEPT

- SADARM munitions are urgently needed to defeat stationary threat systems such as self propelled artillery, infantry fighting vehicles, and other armored combat vehicles to support operations.
- SADARM will significantly enhance the artillery's effectiveness by providing the capability to attack & destroy enemy armor formations beyond line of sight.
- SADARM will be used in the Counterfire, Close Support, Interdiction, and Suppression of ADA.

OPERATIONAL REQUIREMENT

- SADARM must be able to rapidly engage and destroy large numbers of self-propelled artillery with reduced expenditure of ammunition.
- SADARM must facilitate a rapid rate of kill to counter the threat posed.
- ORD is classified secret

FIELDING

- Initial Operational Capability will occur in 4QFY00 with delivery of 550 Projectiles.
- SADARM will be made available to contingency units, when required. The first 50% of SADARM will remain in swing stocks (CONUS depots and Prepositioned Afloat). This includes the IOC quantity of 550 rounds. After reaching 50% of production, CINCs would receive the second 50% to allocate as necessary. When produced, SADARM P3I quantities would be similarly managed.

ISSUES

- FUE slipped due to a \$25M Congressional appropriation reduction in production funds. New FUE date is 4QFY00.
- OPTEC's Operational Test, System Evaluation Report found SADARM "not suitable and not effective" - mainly due to reliability at maximum ranges.
- OSD Comptroller's Office has placed \$30.2M under technical withhold pending approval of Program's Path Forward Plan.
- The objective system, Product Improved SADARM, will be carried by an XM982 Projectile.

HERCULES

OPERATIONAL CONCEPT

The fielded M88A1 lacks the necessary horsepower and braking to safely support the recovery of the Abrams fleet. Improvements incorporated into HERCULES fix these operational shortcomings. In addition, the increased winching and lifting capability accommodate all Abrams tank models including the 70 ton M1A2. Without the improvements incorporated in the HERCULES, units must use two recovery vehicles or a recovery vehicle and another Abrams to tow a disabled tank.

OPERATIONAL REQUIREMENT

- Replaces M88A1
- Safely tow 70 ton Abrams tanks and future 70 ton class combat systems
- Reduce O&S costs over M88A1
- 70 ton winch
- 35 ton hoist / boom
- Increased ballistic protection
- Crew: 3 mechanics

FIELDING

Fielding to 1st Cavalry Division began in July 1997. At the conclusion of FY99, there will be a total buy of 101 M88A2s. The current fielding plan is 46 to the 1st Cavalry Division (4QFY98), 27 to the 4th Infantry Division (2QFY99), 18 to TRADOC (1QFY98-1QFY01) and 10 to the National Training Center (3QFY00). The remaining Force Package 1, 2 and 3 units will not be filled.

AAO = 953 APO = 629 (101 funded)

ISSUES

- The Army decided not to continue funding the procurement of the HERCULES in the FY00-05 POM. This decision was based solely on affordability within Army modernization accounts in a fiscally constrained environment.
- The HERCULES is on the Army's FY00 1-N list.

FUTURE SCOUT CAVALRY SYSTEM

OPERATIONAL CONCEPT

- Conduct area, zone, and route reconnaissance to provide real time intelligence to the tactical cmdr; screen and reconnoiter to provide time and space to the commander, force the enemy to deploy, and identify the enemy's main effort.
- Detect threat beyond target acquisition range; identify enemy beyond direct fire engagement range. Improved survivability, lethality, payload capacity, and mobility over current reconnaissance vehicles (HMMWV and M2/3 BFV)

OPERATIONAL REQUIREMENT

- Manned ground scouts are needed on the battlefield; current systems are deficient; the HMMWV is unprotected and lacks mobility and the Bradley is too big and detectable; non-material solutions have not solved the problem.
- May 1997 FSCS Cooperative Program Exploratory Analysis (CPEA)
- Full Joint AoA planned parallel with the ATD (FY98 to FY01)

FIELDING

- 1076 ea Estimated Fielding; FUE FY07
- Fields six hvy Div's and Two ACR's
- 1 Cav Div 110 ea by FY08
- 3 ID 110ea by FY 09
- 3 ACR 95ea
- 2 ACR 95ea
- 2ID 102 ea
- 4ID 110 ea
- 1ID 110 ea
- 1AD 110 ea by FY16
- TNG/APL 234 ea (between FY08-16)

ISSUES

- New start!
- Cooperative Program with the UK. US/UK will cost share (50/50) the ATD and EMD phases resulting in increased competition and cost savings
- Impact Reserve Component: FSCS will trigger the cascading of some 600 LRAS3 systems to ARNG Battalion Scout Platoons.

M1A2 SEP

OPERATIONAL CONCEPT

- The principal armored combat system on the battlefield to defeat enemy forces using fire and movement
- Spearhead the assaulting elements of the combined arms team in the offense
- In the defense, exploit the mobility and agility to move to positions of advantage over the enemy

OPERATIONAL REQUIREMENT

- Increased 120mm probability hit/kill
- Increased target acquisition and engagement rates
- Commander's Independent Thermal Viewer (provides hunter/killer capability)
- Integration of 2d GEN FLIR
- Increased range capability of eye safe laser range finder
- ACOE compliant

FIELDING PURE FLEET MODERNIZATION SCHEDULE

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	
4ID												= Embedded
1CAV												= Appliqué
3ACR												
3ID												
APS 3												
APS 5												
2ID												
IID												
IAD												
TRADOC												
APS 4 (Korea)												
ARNG												

ISSUES

- Armored System Modernization Report
- Industrial Base
- Gun mounts (50/50 split - GDLS and Rock Island Arsenal
- Lima Army Tank Plant
- DU Armor
- Committees - SASC (Jon Barnes, Dan Cox) SAC (Kraig Siracuse, Tom Hawkins) HASC (Roger Smith, Doug Necessary) HAC (Trish Ryan, Greg Dahlberg)
- Foreign Military Sales - Greece and Turkey

M2/3 BRADLEY FIGHTING VEHICLE (ODS/A3)

OPERATIONAL CONCEPT

- Combined Arms partner to M1A2 SEP and M1A1D
- Infantry Fighting Vehicle provides protected transport to infantry squad to conduct close fight
- Defeats enemy infantry carriers and other light armored vehicles. Able to defeat tanks out to 3750 meters with TOW IIA/B
- Provides Infantry, Cavalry, Air Defense, and Field Artillery versions

OPERATIONAL REQUIREMENT

- A2 ODS: LRF, POSNAV, Integrated GPS, BCIS ready, FBCB2 Applique
- A3: Advanced technologies integration, 2nd GEN FLIR, digital C2, Commanders Independent Viewer (with 2d GEN FLIR), improved BFV acquisition system, Commanders/squads tactical displays

FIELDING

<u>A3</u>		<u>ODS</u>
• 4ID	FY 00-01	• 3ID (FIELDDED)
• 1CD	FY 01-03	• 4ID (FIELDDED)
• APS 5	FY 08	• APS3 (FIELDDED)
• APS3	FY 04	• 1CD (ON GOING)
• 3ID	FY 06	• 3ACR FY03
		• 1AD FY08
		• APS 5 FY08
		• NTC FY02
		• 2ID FY07

ISSUES

Congressional Interest (Past)

Concern over delayed fielding of A2 BFV to ARNG - Congress added \$95M (98) and \$70M (99) for ODS for ARNG. ARNG expresses concern over AO survivability

- Congress directed that A0 to A2 upgrades continue until complete
- Committees - SASC (John Barnes, Dan Cox); SAC (John Young, Tom Hawkins); HASC (Roger Smith, Bob Lautrop); HAC (Trish Ryan)

Unfunding M6A1 (FY04-07) during POM 00-05 and increasing M6 requirement caused current shortfall of 72 Linebackers.

Main Contractor: UDLP (York, Pennsylvania plant)

17

AVENGER

OPERATIONAL CONCEPT

- The Avenger is a Line-of-Sight Air Defense Platform for defeating low altitude aerial targets, including UAVs and cruise missiles. The Avenger has 8 ready to fire Stinger surface to air missiles and a .50 caliber machine gun. The system protects friendly assets in the division and corps areas. Current upgrade is for the Slew-to-Cue capability, which automatically slews the turret onto the target.

FIELDING

- The Avenger is fielded to the AC divisions and 9 ARNG Corps Battalions.
- The last of nine ARNG Avenger battalions (SC) will be fielded in FY99.
- Procurement in FY99 through 07 are for seven COMPO 4 Avenger battalions in the ARNG.

OPERATIONAL REQUIREMENT

- Requirements are for 48 per special division, 36 per light and heavy division, 24 per light ACR and 8 per heavy ACR.
- ARNG requirement is for 36 per Corps Avenger battalion.
- ARNG eSBs require 12 per light BDE, 6 per heavy BDE, and 8 per heavy ACR.

ISSUES

- STC funding was eliminated in FY00 by OSD. This will postpone fieldings by one year to all units after 4th ID and 82nd ABN Division

M6 LINEBACKER

OPERATIONAL CONCEPT

•The Bradley Linebacker provides dedicated forward air defense fire units with the capability to fire Stinger missiles while the crew remains under armor protection. The system also has the 25mm chain gun and a 7.62mm machine gun. The Stinger missile can engage threat aerial platforms, including UAVs and cruise missiles. The M6 is a highly mobile, survivable vehicle compatible with the combined arms team.

FIELDING

- FY99 fieldings are to 3ID, 4ID, 1CD.
- FY00 fielding to 3ACR.

OPERATIONAL REQUIREMENT

- The M6 is authorized 24 per heavy division and 12 per ACR.
- APS 3 and 5 also require 24 systems.

ISSUES

- 99 Linebackers have been procured for all FP1 units (3 ID, 1 CAV, 3 ACR) and partial FP2 (4ID)
- UFR for 72 systems to complete AC requirement. Currently 1ID, 1AD, and 2ID do not have the M6.
- Integration cost of integrating the FAADC2 and FBCB2 onto a common installation kit is unfunded.

SWORD

OPERATIONAL CONCEPT

• SHORAD with Optimized Radar Distribution (SWORD) is an S&T project in SMDC. The concept is for a radar directed, kinetic kill missile to intercept and destroy multiple 240mm rockets. The system is focused on the North Korean chemical rocket threat. Concept is for a Battery (3 platoons to defend critical assets in Korea.

OPERATIONAL REQUIREMENT

- There is no MNS or ORD for this proposed system.
- 8th U.S. Army submitted an ONS in Jun98. HQDA provided an interim response in Sep98.
- FDJ has submitted the ONS for staffing prior to establishing a requirement.

FIELDING

- None- system is not funded.

ISSUES

- OSD directed DARPA to conduct an analysis of the concept to see if it is technically feasible. DARPA's preliminary conclusions are that it may be feasible, but extremely risky and may not be able to accomplish its designed mission.
- SMDC conducted a concurrent study on the feasibility of the project. Their conclusion was that it was technically feasible.
- Funding remains an issue. OSD will not fund unless DARPA recommends to do so. The Army has no funds to conduct further research.

FAADC2

OPERATIONAL CONCEPT

- Forward Area Air Defense Command and Control (FAADC2) integrates weapons, sensors, and command, control, communication, and intelligence architecture to counter the entire spectrum of the air threat to the forward area.
- The digital real-time/near real-time Air Defense early warning and command and control to the Forward area; essential link between sensor and shooter.

OPERATIONAL REQUIREMENT

- Provides automated air picture, A2C2 data, Force and Engagement Operations, and interface with ABCS to the combined arms team at Division level and below.
- Analysis of FAADC2 has occurred during several tests and exercises since the systems inception in 1993. TFXI AWEs have served as a recent tool to evaluate the systems success. Existing ADA early warning systems include visual detection through voice early warning; FAADC2's leap-ahead technology can hardly be compared to the current system.

FIELDING

<u>UNIT</u>	<u>FY</u>	<u>UNIT</u>	<u>FY</u>
3ACR	98	2LCR	02
1-204 (MS)	98	2-265(FL)	03
25ID	98	2-263(SC)	03
1-200(NM)	99	BN#10	04
1ID	99	BN#11	04
1AD	99	BN#12	05
3-200(NM)	00	BN#13	05
3-265(FL)	00	BN#14	05
4-200(NM)	01		
1-265(FL)	01		
2-174(OH)	02		

Previously fielded
101st, 1CAV, 2ID,
3ID 10MTN, 82nd, 4ID

ISSUES

- Developing software to merge FAADC2 with FBCB2. Will realize significant hardware and communications equipment savings.
- Significant funding shortfalls include CHS-2 for initially fielded divisions and digital radio IK retrofit for EPLRS.
- Current POM and EPP funding stream is sufficient to field all 16 ARNG EAD Battalions and 17 Enhanced Separate Brigades.

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M1 BREACHER (GRIZZLY)

OPERATIONAL CONCEPT

- Digitized Armored Breaching system for breaching simple and complex obstacles in support of a Abrams or Bradley based force.
- Provides a full-width clear lane (4.2m) through minefields, rubble, tank ditches, wire, and other obstacles while under armor.
- The current heavy force cannot breach many obstacles w/o stopping to conduct a deliberate breaching operation. The Grizzly will enable the force to breach all obstacles in stride.

OPERATIONAL REQUIREMENT

- Mobility, survivability, & sustainability comparable with M1A2
- Clear standard minefield (down to 12" deep) at 4.5 mph in a single pass
- Reduce standard anti-tank ditch within 5 minutes
- Grizzly is a new capability and does not replace any existing system. COEA demonstrates a clear improvement in force capability & survivability over separate, non-survivable tools which the commanders currently use.

FIELDING

- 1 Cav Div (FY04: 24, FY05: 12)
- 3 In Div (FY06: 12, FY07: 24)
- 3 ACR (FY07: 6)
- 5 Engr Bn (FY08: 12)
- 2 In Div (FY08: 12, FY09: 24)
- 4 In Div (FY11: 36)

ISSUES

- Prime Contractor is UDLF (York, PA). Is in Congressman Goodling's district.
- Army has no under armor complex obstacle breaching capability. Fielding the Grizzly to meet this requirement is the #1 priority for our mobility systems.
- TRADOC & USAES are developing new fielding plans which will provide Grizzlies to the National Guard Enhanced Brigades.

HEAVY ASSAULT BRIDGE (WOLVERINE)

OPERATIONAL CONCEPT

- Digitized armored bridging system which supports M1A2 based force with survivable, mobile assault gap crossing capability
- Provides a MLC 70 bridge which can bridge a gap 50% longer than existing systems.
- Similar maintainability/supportability as supported force through use of M1A2 SEP chassis and Abrams compatible spares and TMDE.

OPERATIONAL REQUIREMENT

- Cross gaps up to 24 m wide
- Support MLC 70 crossing @ 16 kph
- Bridge emplaced within 5 minutes
- Mobility, survivability, & sustainability comparable with the M1A2.
- EMD II testing - launch times & bridge durability met operational requirements
- LFTE - improve survivability over AVLB

FIELDING

- 4 In Div (FY00: 12, FY02: 12)
- 1 Cav Div (FY03: 24, FY04: 12)
- 3 ACR (FY05: 15)
- 3 In Div (FY06: 36)
- 5 Engr Bn(FY07: 12)
- 2 In Div (FY08: 36)

- Primecontractor is GDLS (MI - Senator ~~ISSUES~~)
- SAC decremented \$6.6M in FY99 RDTE. Is Army's #32 priority to be restored.
- Wolverine is built on a common chassis with the Abrams M1A2 SEP. All changes to that program have a direct impact on Wolverine procurement & production
- Wolverine will be fielded to 4 RC corps mechanized engineer units. Displaced AVLBs will be cascaded to RC.
- Wolverine fielding is very slow. Buy one En Bde per year through the POM & EPP.